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EDITED BY

CHARLES R. LANMAN, AND

GEORGE F. MOORE,

Professor in Harvard University,
Cambridge.

Professor in Andover Theological
Seminary.

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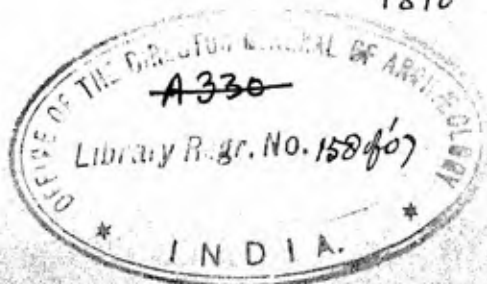
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ARTICLE I.

ON THE DATE OF ZOROASTER.¹

BY A. V. WILLIAMS JACKSON,

PROFESSOR IN COLUMBIA UNIVERSITY, NEW YORK CITY.

Presented to the Society April 18th, 1895.

GREAT men are the children of their age. Heirs to the heritage of the past, they are charged with the stewardship of the possessions to be handed down to the future. Summing up within themselves the influences of the times that call them forth, stamped with the impress of their day, their spirit in turn shows its reflex upon the age that gives them birth. We read them in their age; we read their age in them. So it is of the prophets and sages, religious teachers and interpreters, which have been since the world began. The teaching of a prophet is the voice of the age in which he lives; his preaching is the echo of the heart of the people of his day. The era of a prophet is therefore not without its historic significance; it is an event that marks an epoch in the life of mankind. The age of most of the great religious teachers of antiquity is comparatively well known; but wide diversity prevails with regard to the date at which Iran's ancient prophet Zoroaster lived and taught; yet his appearance must have had its national significance in the land between the Indus and the Tigris; and the great religious movement which he set on foot must have wrought changes and helped to shape the course of events in the early history of Iran. The treatment of this question forms the subject of the present paper.

The Avesta itself gives us no direct information in answer to the inquiry as to the date of Zoroaster. It presents, indeed, a picture of the life and times; we read accounts of King Vishtaspa, the Constantine of the faith; but the fragments that remain of the sacred texts present no absolutely clear allusions to contemporary events that might decisively fix the era. The existing diversity of opinion with reference to Zoroaster's date is largely due to this fact and to certain incongruities in other ancient statements on the subject. The allusions of antiquity to this subject may conveniently be divided into three groups:

¹ This paper forms a companion-piece to the present writer's discussion of 'Zoroaster's Native Place' in *J.A.O.S.* xv. 221-282.

- I. First, those references that assign to Zoroaster the extravagant date B. C. 6000.
- II. Second, such allusions as connect his name with the more or less legendary Ninus and the uncertain Semiramis.
- III. Third, the traditional date, placing the era of Zoroaster's teaching at some time during the sixth century B. C.

All the material will first be presented under the headings A.I., A.II., and A.III.; then a detailed discussion of the data, pages 16-19, under the heading B; and, finally, a summary of results, under the heading C, pages 19-22.

SYNOPSIS OF DIVISION A.

- A.I. Classical passages placing Zoroaster at 6000 B. C.
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 - d. Diogenes Laertius.
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A. DATA FOR THE AGE OF ZOROASTER.

A. I. Allusions placing Zoroaster at 6000 B. C.

The allusions of the first group comprehend those classical references that assign to Zoroaster the fabulous age of B. C. 6000 or thereabouts.¹ These references are confined chiefly to the classics, and their chief claim to any consideration is that they

purport to be based upon information handed down from Eudoxus, Aristotle, and Hermippus. Such extraordinary figures, however, are presumably due to the Greeks' having misunderstood the statements of the Persians, who place Zoroaster's millennium amid a great world-period of 12,000 years, which they divided into cycles of 3,000 years,¹ and in accordance with which belief Zoroaster's *fravashi* had in fact existed several thousands of years. The classical material on the subject is here presented.

¹ So the general classical statements of '5,000 years before the Trojan war,' or the like, although some variant readings 500 (for 5,000) are found. The number 5,000 (6,000) is, however, the correct one.

² According to the chronology of the Bundahish 34. 7, Zoroaster appeared at the end of the ninth millennium: compare, West *Bundahish* transl., S. B. E. v. 149-151 notes; Spiegel *Eranische Alterthums-kunde* i. 500-508; Windischmann *Zoroastrische Studien* 147-165; also Plutarch *Is. et Os.* 47, Θεόπομος δὲ φησι κατὰ τοὺς μάγους ἀνὰ μέρος τρισχίλια ἔτη τὸν μὲν κρατεῖν, τὸν δὲ κρατεῖσθαι τὸν θεῶν, ἄλλα δὲ τρισχίλια μάχεσθαι καὶ πολεμεῖν καὶ ἀναλβεῖν τὰ τοῦ ἑτέρου τὸν ἕτερον· τέλος δ' ἀπολείπεσθαι τὸν Ἀϊθην.

(a) Pliny the Elder (A. D. 23-79), *N. H.* 30. 1. 2 [Wn. 279, 288], cites the authority of Eudoxus of Cnidus (B. C. 368), of Aristotle (B. C. 350), and of Hermippus (c. B. C. 250), for placing Zoroaster 6000 years before the death of Plato or 5000 years before the Trojan war: *Eudoxus, qui inter sapientiae sectas clarissimam utilissimamque eum (artem magicam) intellegi voluit, Zoroastrem hunc sex milibus annorum ante Platonis mortem fuisse prodidit; sic et Aristoteles. Hermippus qui de tota ea arte diligentissime scripsit et viciens centum milia versuum a Zoroastre condita indicibus quoque voluminum eius positissimè explanavit, praeceptorem, a quo institutum diceret, tradidit Agonacen, ipsum vero quinque milibus annorum ante Troianum bellum fuisse.* For that reason apparently (*N. H.* 30. 1. 11) he speaks of Moses as living *multis milibus annorum post Zoroastren*. But Pliny also expresses uncertainty as to whether there was one or two Zoroasters, and he mentions a later Proconnesian Zoroaster: *N. H.* 30. 1. 2 *sine dubio illic (ars Magica) orta in Perside a Zoroastre, ut inter auctores convenit. Sed unus hic fuerit, an postea et alius, non satis constat;* and after speaking of Osthanes, the Magian who accompanied Xerxes to Greece, he adds: (*N. H.* 30. 2. 8) *diligentiores paulo ante hunc (Osthanem) ponunt Zoroastrem alium Proconnesium.* Pliny's Proconnesian Zoroaster must have flourished about the seventh or sixth century.

(b) Plutarch (A. D. 1st cent.) adopts likewise the same general statement that places the prophet Zoroaster about 5000 years before the Trojan war: *Is. et Os.* 46 (ed. Parthey, p. 81); Ζωροάστρης (sic) ὁ μάγος, ὃν πεντακισχίλις ἔτεσι τῶν τρωικῶν γεγονέναι πρεσβύτερον ἱστοροῦσιν.

(c) The Scholion to the Platonic Alcibiades, 1. 122 (ed. Baiter, Orelli et Winckelmann, p. 918), makes a statement, in substance tantamount to the last one, as follows: Ζωροάστρης ἀρχαιότερος ἑξακισχίλις ἔτεσιν εἶναι λέγεται Πλάτωνος.

(d) Diogenes Laertius (A. D. 2d, 3d century), *de Vit. Philos. Proem.* 2 (recens. Cobet, Paris, 1850, p. 1), similarly quotes Hermodorus (B. C. 250 ?), the follower of Plato, as authority for placing Zoroaster's date at 5000 years before the fall of Troy, or, as he adds on the authority of Xanthus of Lydia (B. C. 500-450), Zoroaster lived 6000 years (some MSS. 600) before Xerxes. The text runs: ἀπὸ δὲ τῶν Μάγων, ὧν ἄρχει Ζωροάστρην τὸν Πέρσην, Ἑρμόδωρος μὲν ὁ Πλατωνικὸς ἐν τῷ περὶ μαθημάτων φησὶν εἰς τὴν Τροίαν ἀλώσιν ἔτη γεγονέναι πεντακισχίλια· Ξάνθος δὲ ὁ Λυδοὺς εἰς τὴν Ξέρξου διάβασιν ἀπὸ τοῦ Ζωροάστρου ἑξακισχίλια φησι, καὶ μετ' αὐτὸν γεγονέναι πολλοὺς τινες Μάγους κατὰ διαδοχὴν, Οὐστάνης καὶ Ἀστραμφύχους καὶ Γωβρύας καὶ Παζάτας, μέχρι τῆς τῶν Περσῶν ὑπ' Ἀλεξάνδρου καταλύσεως.

(e) Lactantius, *Inst.* 7. 15, must have entertained some similar opinion regarding Zoroaster; for he speaks of Hystaspes (famous as Zoroaster's patron) as being an ancient king of Media long before the founding of Rome: *Hystaspes quoque, qui fuit Medorum rex antiquissimus . . . sublatum iri ex orbe imperium nomenque Romanum multo ante praefatus est, quam illa Trojana gens conderetur* (cf. Migne *Patrolog.* vol. vi and Windischmann *Zor. Stud.* p. 259, 293).

(f) Suidas (10th century A. D.), s. v. Ζωροάστρης, speaks of two Zoroasters, of whom one lived 500 (read 5000 years) before the Trojan war, while the other was an astronomer of the time of Ninus—ἐγένετο δὲ πρὸ τῶν Τρωικῶν ἔτεσιν φ'.

(g) Georgius Syncellus' *Chronographia*, i., p. 147 ed. Dind., alludes to a Zoroaster as one of the Median rulers over Babylon. Cf. Windischmann *Zor. St.* p. 302, and Haug *A Lecture on Zoroaster*, p. 23, Bombay, 1865.

A.II. Allusions associating Zoroaster's Name with Semiramis and Ninus.

Second to be considered is a series of statements which connect the name of Zoroaster with that of the more or less uncertain Ninus and Semiramis.¹ These references also are confined almost exclusively to the classics, and the difficulty with them is that, in addition to their general character, which bears a legendary coloring, they are based apparently upon a misinterpretation of the name Ὀξνάρης or its variants in a fragment of Ctesias (discussed below), which has been understood as an allusion to Zoroaster.

¹ The date of Semiramis, however, is regarded by Lehmann (*Berliner Philolog. Wochenblatt*, Jan. März, 1894) to be about B. C. 800.

(a) The authority of Ktesias (B. C. 400) is quoted by Diodorus Siculus (A. D. 1st century) 2. 6, for the statement that Ninus with a large army invaded Bactria and by the aid of Semiramis gained a victory over King Oxyartes. See *Fragments of the Persika of Ktesias*, ed. Gilmore p. 29. Instead of the name Ὀξνάρης, the manuscript variants show Ἐχαόρης, Χαόρης, Ζαόρης. The last somewhat recalls the later Persian form of the name Zoroaster; and Kephalion, Justin, Eusebius, and Arnobius, drawing on

Ktesias, make Zoroaster a Bactrian or the opponent of Ninus (see below); but Ὁζώδρης may very well be an independent name, identical as far as form goes with Av. *uhsyat-ereta*, Yt. 13. 128, and it is doubtless the better Greek reading. The other statements are here given as they similarly come into consideration with respect to Zoroaster's native place. They are:—

(b) Fragments of Kephalion (A. D. 120), preserved in the Armenian version of Eusebius, *Chron.* 1. 43, ed. Ancher: a passage describes the defeat of Zoroaster the Magian, king of the Bactrians, by Semiramis: "*Incipio scribere de quibus et alii commemorarunt atque imprimis Ellanicus Lesbicus Ctesiasque Cnidius, deinde Herodotus Alicarnassus.*" *Primum Asiae imperarunt Assyrii, ex quibus erat Ninus Beli (filius), cujus regni aetate res quam plurimae celeberrimaeque virtutes gestae fuerunt.*" *Postea his adjiciens profert etiam generationes Semiramidis atque (narrat) de Zoroastri Magi Bactrianorum regis certamine ac debellatone a Semiramide: nec non tempus Nini LII annos fuisse, atque de obitu ejus. Post quem quum regnasset Semiramis, muro Babylonem circumdedit ad eandem formam, qua a plerisque dictum est: Ctesia nimirum et Zenone Herodotogue nec non aliis ipsorum posteris. Deinde etiam apparatus belli Semiramidis adversus Indos ejusdemque cladem et fugam narrat, etc.* Identical with this is Georgius Syncellus (c. A. D. 800), *Chron.* ed. Dind. i. p. 315: "Ἀρχομαι γράφειν, ἀφ' ὧν ἄλλοι τε ἐμνημόνευσαν, καὶ τὰ πρῶτα Ἑλλάνικός τε ὁ Λέσβιος καὶ Κτησίης ὁ Κνίδιος, ἔπειτα Ἡρόδοτος ὁ Ἀλικαρνασεύς. τὸ παλαιὸν τῆς Ἀσίας ἐβασίλευσαν Ἀσσύριοι, τῶν δὲ ὁ Βήλου Νίνος." *εἰς ἐπάγει γένεσιν Σεμιράμιδος καὶ Ζωροάστρου μάχου (Mss. βάτου) ἔπειτα νῆς τῆς Νίνου βασιλείας. μετ' ὃν Βαβυλῶνα, φησὶν, ἡ Σεμίραμις ἐτείχευσε, τρόπον ὡς πολλοῖς λέλεκται, Κτησίης, Ζήνωνι (Müller Δείωνι), Ἡρόδοτῳ καὶ τοῖς μετ' αὐτοὺς στρατείην τε αὐτῆς κατὰ τῶν Ἰνδῶν καὶ ἤτταν κ. τ. λ.* Cf. also Windischmann *Zor. Stud.*, p. 303, Spiegel *Eran. Alter.*, i. 676-7; Müller *Frag. Hist. Gr.* iii. 627.

¹ This mention of Herodotus might possibly be adduced as an argument that Herodotus was at least acquainted with the name of Zoroaster.

(c) Similarly the reputed work of the Armenian Moses of Khorni, i. 16, makes Zoroaster a contemporary of Semiramis, and calls him "a Magian, the sovereign of the Medes," who seizes the government of Assyria and Nineveh, so that she flees from him and is killed in Armenia. Cf. Gilmore *Ktesias Persika*, p. 30 n, Spiegel *Eran. Alterthumskunde*, i. 682, Windischmann *Zor. Stud.* p. 302, 303, Müller *Frag. Hist. Gr.* iii. 627, v. 328.

(d) Again, Theon (A. D. 130?) *Progymnasmata* 9, περὶ συγκρίσεως, ed. Spengel, *Rhet. Graec.*, ii. p. 115, speaks of "Zoroaster the Bactrian" in connection with Semiramis: Οὐ γὰρ εἰ Τόμυρις κρείττων ἐστὶ Κίρον ἢ καὶ ναὶ μὰ Δία Σεμίραμις Ζωροάστρου τοῦ Βακτρίου, ᾗδ' ἡ συγχωρητέον καὶ τὸ βῆλυ τοῦ ἀρρενος ἀνδρείωτερον εἶναι. Cf. Windischmann, *Zor. Stud.*, p. 290, Spiegel *Eran. Alterthumsk.*, i. 677.

(e) Justin (A. D. 120), in his epitome of Trogus Pompeius' *Hist. Philippic.*, 1. 1, distinctly makes Zoroaster the opponent of Ninus, and says that he was king of Bactria and a Magician: *postremum bellum illi fuit cum Zoroastre, rege Bactrianorum, qui primus dicitur artes magicas invenisse et mundi principia siderumque motus diligentissime spectasse.*

(f) Arnobius (A. D. 297), *Adversus Gentes* 1. 5, in like manner mentions a battle between the Assyrians and the Bactrians under the leadership respectively of Ninus and Zoroaster: *inter Assyrios et Bactrianos, Nino quondam Zoroastreque ductoribus.* See Gilmore, *Ktesias* p. 36.

(g) Eusebius (A. D. 300), *Chron.* 4. 35 ed. Aucher, has a like allusion: *Zoroastres Magus rex Bactrianorum clarus habetur adversus quem Ninus dimicat*; and again (Windischmann, p. 290), *Praeparatio Evang.* 10. 9, 10, ed. Dind. I. p. 560, Νίνος, καθ'ὸν Ζωροάστρης ὁ Μάγος Βακτρίων ἐβασίλευσε.

(h) Paulus Orosius (5th century A. D.), the Spanish presbyter, of whose chronicle we have also King Alfred's Anglo-Saxon version, states that Ninus conquered and slew Zoroaster of Bactria, the Magician. See Orosius, *Old-English Text and Latin Original*, ed. by Henry Sweet (Early Eng. Text Soc. vol. 79), p. 30-31: *Novissime Zoroastrem Bactrianorum regem, eundemque magicæ artis repertorem, pugna oppressum interfecit.* Or, in Anglo-Saxon, *and hē Ninus Soroastrem Bactriana cýning, se cūthe ærest manna drýcraestas, hē hine oferweann and ofslōh.*

(i) Suidas in his *Lexicon* (s. v. *Zoroaster*) assumes the existence of two Zoroasters (cf. p. 4), the second an astrologer: Ἀστρονόμος ἐπὶ Νίνου βασιλέως Ἀσσυρίων.

(j) In the Snorra Edda Preface, Zoroaster is identified with Baal or Bel, cf. Jackson in *Proceedings A. O. S.*, March, 1894, vol. xvi., p. cxxvi.

(k) In some Syriac writers and elsewhere an identification of Zoroaster with Balaam is recorded, for example in the *Lexicon* of Bar 'Ali (c. A. D. 832), s. v. *Balaam*, 'Balaam is Zardosht, the diviner of the Magians.' See Gottheil *References to Zoroaster in Syriac and Arabic Lit.*, pp. 27, 30n, 32 (Drisler Classical Studies, N. Y., 1894). Sometimes he is only compared with Balaam.

A. III. The Native Tradition as to Zoroaster's Date.

Third, the direct Persian tradition comes finally into consideration. This tradition is found in the chronological chapter of the *Bundahish*, 34. 1-9, is supported by the *Arđā-i Virāf*, 1. 2-5, and is corroborated by abundant Arabic allusions (Albīrūnī, Masūdī, et al.). It unanimously places the opening of Zoroaster's ministry at 258 years before the era of Alexander, or 272 years before the close of the world-conqueror's dominion. According to these figures, the date of Zoroaster would fall between the latter half of the seventh century B. C. and the middle of the sixth century; his appearance in fact would be placed in the period just pre-

ceding the rise of the Achaemenian dynasty. This merits attention also in detail.

(a) The *Ardā-i Virāf* 1. 1-5 in round numbers places Zoroaster three hundred years before Alexander's invasion. Compare Haug and West *Ardā Virāf* p. 141. 'The righteous Zaratusht made the religion which he had received, current in the world, and until the end of 300 years the religion was in its purity and men were without doubt. But afterwards the foul Evil Spirit, the wicked one, in order to make men doubtful in regard to this religion, instigated the accursed Alexander, the Ruman, who was dwelling in Egypt, so that he came to the country of Iran with severe cruelty and devastation; he also slew the ruler of Iran, and destroyed the metropolis and empire.'

(b) The Bundahish chapter (ch. 34) 'on the reckoning of the years' (to which one MS. adds—'of the Arabs') more exactly computes the various millenniums that made up the 12000 years of the great world-cycle recognized by the worshippers of Mazda. In this period the era of Zoroaster falls at the close of the first 9000 years. He is placed in reality at the beginning of the historic period, if the long reigns attributed to Kai-Vishtāsp and to Vohūman son of Spend-dāt (Av. Spentō-dāta, N. P. Isfendiar), may with reasonably fair justice be explained as that of a ruling house. There seems at least no distinct ground against such assumption. The Bundahish passage 34. 7-8 in West's translation (S.B.E. v. 150-151) reads, (7) 'Kai-Vishtāsp, till the coming of the religion, thirty years, altogether one hundred and twenty years. (8) Vohūman, son of Spend-dād, a hundred and twelve years; Hūmāi, who was daughter of Vohūman, thirty years; Dārāi, son of Cīhar-āzād, that is, of the daughter of Vohūman, twelve years; Dārāi, son of Dārāi, fourteen years; Alexander the Rūman, fourteen years.'

Vishtāsp, after coming of religion	90
Vohūman Spend-dād	112
Hūmāi	30
Dārāi-i Cīhar-āzād	12
Dārāi-i Dārāi	14
Alexander Rūman	14

272

The result therefore gives 272 years from 'the coming of the religion' until the close of the dominion of Alexander the Great, or 258 years before the beginning of his power. A repeated tradition exists that Zoroaster was forty-two years old when he first converted King Vishtaspa, who became his patron. If we interpret 'the coming of the religion' to mean its acceptance by Vishtaspa, we must add 42 years to the number 258 before Alexander in order to obtain the traditional date of Zoroaster's birth. This would answer to the 'three hundred years before Alexander' of the *Ardā-i Virāf*. If, however, we take the phrase 'coming of the religion' to mean the date of Zoroaster's entry upon his min-

istry (as does West, *S.B.E.* v. 218), we must then add 30 years, which was Zoroaster's age when he beheld his first vision of Ormazd.

A calculation based upon the figures of this tradition would place Zoroaster's birth 42 years + 258 years (=300 years) before B. C. 330, the date of the fall of the Iranian kingdom through Alexander's conquest; in other words it would assign Zoroaster's birth to about B. C. 630. According to the same tradition the duration of the various reigns of the Kayanian dynasty would be about as follows:

King.	Reigned years.	Fictitious date B. C.
Vishtāsp.....	120	618—498
Vohūman (Ardashir Dirazdast) ..	112	498—386
Hūmāi.....	30	386—356
Dārāi.....	12	356—344
Dārāi-i Dārāi.....	14	344—330

The results would be somewhat altered if the computation be made according to lunar years or if a different point of departure be taken. The excessive lengths of the reigns of Vishtāsp and Vohūman seem suspicious and suggest round numbers unless we are to interpret them as comprising successive rulers; for example, in historic times, beside Hystaspes, the father of Darius, we have the names of two other Hystaspes, later connected with the ruling house of Bactria.¹ The historic reigns of the Achaemenians may be compared (cf. Stokvis *Manuel d'Histoire*, p. 107).

Cyrus.....	B. C. 558—529
Cambyses.....	529—521
Darius I.....	521—485
Xerxes.....	485—465
Artaxerxes Longimanus.....	465—425
Darius Nothos.....	425—405
Artaxerxes Mnemon.....	405—362
Artaxerxes Ochus.....	362—340
[Arses].....	340—337
Darius Codomannus.....	337—330

Comparison may be made, as with West,² identifying the long reign of Vohūman who is called Ardashir (Artaxerxes or Ardashir Dirazdast 'the long-handed') with Artaxerxes Longimanus and his successors. Historical grounds throughout seem to favor this. For Hūmāi, West suggests Parysatis as a possibility. The last two Dārāis answer to Ochus and Codomannus, and the reign of Kai-Vishtāsp 'seems intended to cover the period from Cyrus to Xerxes' (West).³ There seems every reason to identify Vohūman Ardashir Dirazdast with Artaxerxes Longimanus, according to the Bahman Yasht (Byt. 2. 17), as this Kayanian king 'makes the religion current in the whole world.'⁴ One might be possibly tempted to regard the Vishtāsp reign as representing the Bactrian rule until Artaxerxes, and assume that Zoroastrianism then became the faith of Persis.⁵ This might account for the silence as to the early Achaemenians and shed some light on the

problem concerning the Achaemenians as Zoroastrians; but there seems to be no historic foundation for such assumption. Suffice here to have presented the tradition in regard to the reigns of the Kayanian kings as bearing on Zoroaster's date and the traditional 258 years before Alexander as the era of 'the coming of the religion.'

¹ See genealogical tables of the Achaemenidae in Stokvis *Manuel d'Histoire, de Généalogie, et de Chronologie*, p. 108 (Leide, 1888); Pauly *Real-Encyclopædie*, article 'Achaemenidae,' Justi *Geschichte des alten Persiens* p. 15, *Iranisches Namenbuch*, p. 398-399, and Smith *Classical Dictionary* article 'Hystaspes.'

² West, *Bundahish translated*, S.B.E. v. 150 n, 198 n.

³ de Harlez, *Avesta traduit*, *Introduction* p. ccxxviii, thinks that the early Achaemenians were intentionally sacrificed. Spiegel, *Z.D.M.G.*, xlv. 203, identifies the first Dārāf with Darius I., and believes that he was misplaced in the kingly list. This I doubt.

⁴ West, *Byt. transl.*, S.B.E. v. 199.

⁵ Dubeux, *La Perse* p. 57, sharply separates the Oriental account of the Persian kings from the historical account.

(c) The sum of 258 years is given also by so careful an investigator as Albīrūnī (A. D. 973-1048). His statements are based on the authority of 'the scholars of the Persians, the Hērbadhs and Maubadhs of the Zoroastrians.' In his *Chronology of Ancient Nations* p. 17 l. 10 (transl. Sachau), is a statement of the Persian view in regard to Zoroaster's date: 'from his (i. e. Zoroaster's) appearance till the beginning of the Æra Alexandri,' they count 258 years.' Several times he gives the received tradition that Zoroaster appeared in the 30th year of the reign of Vishtāsp. In another place, *Chron.* p. 196 (transl. Sachau), he gives further information in regard to Zoroaster's time: 'On the 1st Ramaḍān A. H. 319 came forward Ibn 'Abī-Zakarriyā. . . If, now, this be the time (i. e. A. H. 319=A. D. 931) which Jamasp and Zaradusht meant, they are right as far as chronology is concerned. For this happened at the end of the Æra Alexandri 1242, i. e. 1500 years after Zaradusht.' From this statement we may compute back to the year B. C. 569 as a date when a prophecy is supposed to have been made by Zoroaster and Jamasp. Albīrūnī is not exhausted yet. In *Chron.* 121 (transl. Sachau), he says 'we find the interval between Zoroaster and Yazdajird ben Shāpūr to be nearly 970 years.' This gives the date about B. C. 571 if we count Yazdajird's reign as A. D. 399-420. Furthermore the carefully constructed tables which Albīrūnī gives from various sources are interesting and instructive, owing to their exact agreement with the reigns of the Kayanian kings as recorded in the Bundahish. Thus, *Chron.* p. 112, 107-114 (transl. Sachau):

Kai Vishtāsp till the appearance of Zoroaster.....	30
The same after that event.....	90
Kai Ardashīr Bahman (Vohūman).....	112
Khumānī (Hūmāī).....	80
Dārā.....	12
Dārā ben Dārā.....	14

On p. 115 he contrasts these dates with those given by early occidental authorities. Finally, *Chron.* p. 32 (transl. Sachau), the name of Thales is brought into connection with Zoroaster. So much for the information furnished by Albīrūnī.

¹ Albīrūnī *Chronology of Ancient Nations* transl. and ed. by Sachau, p. 100.

² According to Albīrūnī p. 32 (transl. Sachau) the *Æra Alexandri* would date from the time when Alexander left Greece at the age of twenty-six years, preparing to fight with Darius.

(d) Of somewhat earlier date but identical in purport is the statement found in Masūdī's *Meadows of Gold*, written in A. D. 943-4 (Masūdī died A. D. 951). Like the Bundahish and like Albīrūnī, Masūdī reports that 'the Magians count a period of two hundred and fifty-eight (258) years between their prophet Zoroaster and Alexander.'³ He reiterates this assertion in *Indicatio et Admonitio*⁴ by saying 'between Zoroaster and Alexander there are about three hundred years.' Nearly the same, but not exactly identical figures, are found as in the Bundahish, regarding the length of the reigns of the various Kayanian kings; Zoroaster is stated, as elsewhere, to have appeared in the thirtieth (30) year of Vishtāsp's reign and he dies at the age of seventy-seven (77) after having taught for thirty-five (35) years.⁵ The statement that Zoroaster lived to the age of 77 years is also found elsewhere.⁶ What Masūdī has to say on the subject of Nebuchadnezzar's being a lieutenant of Lohrasp (Aurvataspa) and regarding Cyrus as contemporary with Bahman will be mentioned below, as a similar statement occurs in the Dinkart (Bk. 5).

¹ Masudi (Maçoudī), *Les Prairies d'Or. Texte et traduction par Barbier de Meynard*, iv. 107 'Les Mages comptent entre leur prophète Zoroastre, fils d'Espimān, et Alexandre, une période de deux cent cinquante-huit ans. Entre Alexandre, qu'ils font régner six ans, et l'avènement d'Ardéchir, cinq cent dix-sept ans; enfin entre Ardéchir et l'hégire cinq cent soixante-quatre ans. . . . du règne d'Alexandre à la naissance du Messie, trois cent soixante-neuf ans; de la naissance du Messie à celle du Prophète cinq cent vingt et un ans.' Observe especially that Masudi in *Indicatio et Admonitio* p. 327-28) accounts for the intentional shortening of the period between Alexander and Ardashīr. What he has to say on this subject is worth looking up in connection with *S.B.E.* v. 151 note.

² Masudi, *Le Livre de l'Indication et de l'Admonition* (in *Prairies d'Or*, ix. p. 327), 'Zoroastre fils de Poroschasp fils d'Asinman, dans l'Avesta, qui est le livre qui lui a été révélé, annonce que, dans trois cents ans, l'Empire des Perses éprouvera une grande révolution, sans que la religion soit détruite; mais qu'au bout de mille ans, l'empire et la religion périront en même temps. Or entre Zoroastre et Alexandre il y a environ trois cents ans; car Zoroastre a paru du temps de Caïbistasp, fils de Caïlohrasp, comme nous l'avons dit ci-devant.' See Masudi *Kitāb al-Tanbih* p. 90 seq., ed. de Goeje, Leyden, 1894. Compare also Gottheil, *References to Zoroaster* p. 37 (in *Drisler Classical Studies*, New York, 1894).

³ Masudi *Prairies d'Or*. ii. p. 153 ed. Barbier de Meynard. 'Youstasf (Gustasp) régna après son père (Lohrasp) et résida à Balkh. Il était sur le trône depuis trente ans, lorsque Zeradecht, fils d'Espimān se présenta devant lui. . . . (p. 127). Youstasf régna cent

vingt ans avant d'adopter la religion des Mages, puis il mourut. La prédication de Zeradect dura trente-cinq ans, et il mourut âgé de soixante et dix-sept ans.' The detailed reigns (Masudi *op. cit.* ii. 126-129) are Vishtāsp 120 years, Bahman 112, Hūmāi 30 (or more), Dārā 12, Dārā son of Dārā 30, Alexander 6 (cf. vol. iv. p. 107 'Alexandre, qu'ils font régner six ans.'). The latter would answer pretty nearly to the commonly received years of Alexander in Persia, B. C. 330-323. Observe that the years of the last three reigns vary somewhat from the Bundahish. Deducting from Vishtāsp's reign the 30 years till Zoroaster appeared and counting simply to the coming of Alexander, the resulting 274 years would place Zoroaster's appearance at B. C. 604 or, if 42 years old at the time, his birth at B. C. 646. But notice that instead of 274 years as here, Masudi elsewhere says (*Prairies d'Or*, iv. 106, quoted above) there were 258 years between Zoroaster and Alexander.

⁴ E. g. Dinkart Bk. 7 (communication from West) and in the Rivāyats.

(e) The period at which the Arabic chronicler Tabarī (died A. D. 923)¹ places Zoroaster in his record of Persian reigns, is practically identical with the preceding in its results, although he occasionally differs in the length of the individual reigns, e. g. Bahman 80 years (although he mentions that others say 112 years), Hūmāi about 20 years, Dārā 23 years. He tells also of a tradition that makes of Zoroaster one of the disciples of Jeremiah. The latter, according to the generally accepted view, began to prophesy about B. C. 626. These points will be spoken of again below.

¹ See Zotenberg *Chronique de Tabari, traduite sur la version persane d'Abou-Alli Mo'hammed Bel'amī*, tome i. 491-508, Paris, 1867.

(f) The Dabistan (translated by Shea and Troyer, i. 306-309) narrates that the holy cypress which Zoroaster had planted at Kashmir and which was cut down by the order of Mutawakkal, tenth khalif of the Abbassides (reigned A. D. 846-860), had stood 'fourteen hundred and fifty years (1450) from the time of its being planted, to the year 232 of the Hejrah (A. D. 846).' If these years be reckoned as solar years, according to the custom of the ancient Persians, and counted from the beginning of Mutawakkal's reign, the date of the planting of the cypress would be B. C. 604; but if reckoned according to the lunar calendar of the Mohammedans (i. e. equivalent to 1408 solar years), the epoch would be B. C. 562.¹ The former date (B. C. 604) recalls the reckoning of Masudi alluded to above, on p. 10. The event of the planting must have been an occasion of special moment; from a reference to the same in Firdausī (translation of Muhl, iv. 291-93, Paris, 1877), the conversion of Vishtaspa is perhaps alluded to. If the conversion of Vishtaspa really be alluded to, 42 years must be added to give the approximate date of Zoroaster's birth. Perhaps, however, some other event in the prophet's life is commemorated.² In any case the results lead us to the latter part of the seventh century B. C. and the first part of the sixth century.

¹ See the calculation of Shea and Troyer, *Dabistan, translated* i. 308 n, Paris, 1843 and Mirkhond's *History of the Early Kings of*

Persia, transl. Shea, p. 281-82, London, 1832. According to E. Rōth 'Zoroastriſche Glaubenslehre' in *Geschichte unserer abendlndischen Philosophie* i. 350, the era of the cypress is B. C. 560. This is adopted by Floigl *Cyrus und Herodot* p. 15, 18 (Leipzig, 1881).

² In case the 1450 years be reckoned back from the date of Mutawakkal's death (A. D. 860) instead of from the beginning of his power, the numbers would be respectively B. C. 590 (if solar), or B. C. 548 (if lunar).

(g) The figures of the chapter-heading in the *Shh Namah* of Firdausi (A. D. 940-1020) likewise place the opening of Vish-taspa's reign at about three hundred years before Alexander's death.¹

¹ Firdusii *Schahname* ed. Vullers-Landauer iii. p. 1495 seq. See also Shea & Troyer's *Dabistan* Introd. i. p. lxxxvi and p. 380. Consult the chapter-headings of the reigns in Mohl's translation of Firdausi vols. iv-v. Observe that Bahman is assigned only 99 years instead of the usual 112; the duration of Vishtaspa's reign is given in Mohl, vol. iv. 587 'cent vingt ans' in harmony with the usual tradition.

(h) The Persian historical work *Mudjmal al-Tawrikh* (A. H. 520=A. D. 1126)¹ following the authority of the Chronicle of the Kings of Persia, brought from Farsistan by Bahram, son of Merdanschh, Mobed of Shapur, enumerates 258 years before Alexander.² The Ulema-i Islam counts three hundred.³

¹ See *Extraits du Mudjmal al-Tewarikh, relatifs  l'histoire de la Perse, traduits du persan, par Jules Mohl*. (Journal Asiatique, tome xi. pp. 136, 258, 320, Paris, 1841.)

² Cf. *op. cit.* p. 280. The author acknowledges indebtedness also to Hamzah of Isfahan, Tabari, and Firdausi. His chronology may be deduced from pp. 380-389 of the work cited; it runs, Lohrasp 120 years, Gushtasp 120 years, Bahman 112, Hmi 30, Darab 12 [or 14], Dara son of Darab 14 [or 16], Alexander 14 [or 28]. Observe the alternative figures in the case of the last three numbers.

According to Rōth *Geschichte unserer abendlndischen Philosophie* i. 351 the author of the *Mudjmal al-Tawrikh* places Zoroaster 1700 years before his own time; on this ground Rōth places the death of Zoroaster at B. C. 522, and is followed by Floigl *Cyrus und Herodot* p. 18. Cf. Kleuker's *Zend-Avesta*, Anh. 2, Bd. 1, Theil i. p. 347.

³ See Vullers *Fragmente ber Zoroaster*, p. 58.

(i) Interesting is the fact noticed by Anquetil du Perron,¹ that a certain religious sect that immigrated into China A. D. 600 are evidently of Zoroastrian origin and that these believers have an era which dates approximately from B. C. 559; this date Anquetil regards as referring to the time when Zoroaster left his home and entered upon his mission—a sort of Iranian Hejira.

¹ See Anquetil du Perron quoted by Kleuker *Anhang zum Zend-Avesta* Bd. i, Thl. 1, pp. 394-361; cited also by Shea, *Mirkhond's History*, p. 232, and by Rōth in *Geschichte abendlnd. Philosophie* i. 353 and note 566, and followed by Floigl *Cyrus und Herodot* p. 18.

(j) Similar in effect as far as concerns the period at which they place the prophet, although of doubtful value or otherwise to be

explained, are those Syriac and Arabic reports which connect the name of Zoroaster with Jeremiah and which make him the latter's pupil or even identify him with Baruch the scribe of Jeremiah.¹ Presumably this association is due to confusing the Arabic form of the name Jeremiah *Armiah* with Zoroaster's supposed native place *Urmiah* (Urumiyah).²

¹ (a) The Syro-Arabic Lexicon of Bar Bahlûl (about A. D. 963) s. v. *Kāsōmā* (divinator): 'Divinator, like Zardosht, who people say is Baruch the Scribe; and because the gift of prophecy was not accorded to him he went astray, journeyed to [other] nations and learned twelve tongues.' Cf. Payne-Smith *Thesaurus Syriacus*, col. 3704.

(β) Also Bishop Ishōdad of Hadatha (about A. D. 852) commentary on Matth. ii. 1, 'Some say that he (Zoroaster) is the same as Baruch the pupil of Eramya (Jeremiah), and that because the gift of prophecy was denied him as [had been] his wish, and because of that bitter exile and the sack of Jerusalem and the Temple, he became offended (or angry) and went away among other nations, learned twelve languages, and in them wrote that vomit of Satan, i. e. the book which is called Abhasta.' Cf. Gottheil *References to Zoroaster* p. 29.

(γ) Identically, Solomon of Hīlāt (born about A. D. 1222), *Book of the Bee*, 'this Zārādosht is Baruch the scribe,' p. 81 seq. ed. Budge (*Anecdota Oxoniensia*), also E. Kuhn *Eine zoroastrische Prophezeiung in christlichem Gewande* (Festgruss an R. von Roth, Stuttgart, 1893, p. 219). Consult especially Gottheil *References to Zoroaster* (Drisler Classical Studies, New York, 1894).

(δ) Tabarī (died A. D. 923) likewise notices the association of Zoroaster with Jeremiah. According to him 'Zoroaster was of Palestinian origin, a servant to one of the disciples of Jeremiah the prophet, with whom he was a favorite. But he proved treacherous and false to him. Wherefore God cursed him, and he became leprous. He wandered to Ādharbāijān, and preached there the Magian religion. From there he went to Bishtāsp (Vishtaspa), who was in Balkh. Now when he (Zoroaster) had come before him, and preached his doctrine to him, it caused him to marvel, and he compelled his people to accept it, and put many people to death on its account. Then they followed it (the religion). Bishtāsp reigned one hundred and twelve (112) years.' Gottheil *References to Zoroaster*, p. 37. See also *Chronique de Tabarī traduite par H. Zotenberg*, i. p. 499.

(ε) The same general statements of Tabarī are repeated by Ibn al-Athīr (18th century) in his *Kitāb al Kāmil fī al ta'arikh*. See Gottheil *References to Zoroaster*, p. 39.

(ς) Once the Syrian Gregorius Bar 'Ebhṛāyā Abulfaraj (c. A. D. 1250) calls Zoroaster a disciple of Elijah (mistake for Jeremiah?), see Gottheil *References to Zoroaster*, p. 42.

(η) Similarly the Arab historian Abu Mohammed Mustapha calls Zoroaster a disciple of Ezr (Ezra), see Hyde *Hist. Relig. Veterum Persarum*, p. 313.

² So suggested by de Sacy *Notices et Extraits des Manuscrits de la Bibl. du Roi*, ii. 319, see Gottheil *References to Zoroaster* (Drisler Classical Studies p. 30 note).

(k) Pointing to a similar era are the Pahlavi (Dinkart bk. 5. and Mkh.) and Perso-Arabic allusions to Nebuchadnezzar as lieutenant of Vishtāsp's predecessor Lohrasp and of Vishtāsp himself as well as of his successor Bahman (Vohūman). In the same connection Cyrus's name is joined with Vishtāsp and Bahman.¹

¹ (a) According to Tabarī (10th century A. D.) and Masūdī, Nebuchadnezzar was lieutenant successively under Lohrasp, Vishtāsp and Bahman; the tradition regarding Lohrasp's taking of Jerusalem is found in the Pahlavi Dinkart bk. 5 and Mainōg-i Khirad 27. 66-67, transl. West, *S.B.E.* xxiv. 64. Tabarī (or rather the Persian version of the latter by Bel'amī) gives two different versions of the story (see *Chronique de Tabarī, traduite sur la version Persane de Bel'amī par H. Zotenberg*, vol. i, pp. 491-507, Paris, 1867), and (Tabarī *op. cit.* p. 503) the return of the Jews to Jerusalem is placed in the 70th year of Bahman. Signs of confusion are evident. So also in Mirkhond (15th century A. D.) who in his history repeats Tabarī's statement with reference to Nebuchadnezzar and Lohrasp, and makes Cyrus a son of Lohrasp although he is placed in the reign of Bahman. He regards Bahman (Vohūman) as a contemporary of Hippocrates (B. C. 460-357) and Xenocrates (B. C. 396-314) which would harmonize properly with the traditional dates above given (p. 8-9) for Bahman's reign. See Shea *Mirkhond's History*, pp. 264, 291, 343).

(β) Masūdī is worth consulting on the same point, especially in respect to certain presumed relations between the Persians and the Jews. See Barbier de Meynard *Maqoudi Les Prairies d'Or* ii. 119-128.

(1) At this point may be mentioned two other allusions that place Zoroaster's activity in the sixth century before the Christian era, although the former of these rests upon the identification of the prophet's patron Vishtaspa with Hystaspes the father of Darius. The first of these allusions, that given by Ammianus Marcellinus (5th century A. D.),¹ directly calls Vishtaspa (Hystaspes) the father of Darius, although Agathias (6th century A. D.)² expresses uncertainty on this point. The second allusion is found in Eutychius, the Alexandrine Patriarch, who makes Zoroaster a contemporary of Cambyses and the Magian Smerdis,³ a view which is shared by the Syrian Gregorius Bar 'Ebhriyā Abulfaraj (c. A. D. 1250).⁴

¹ Ammian. Marcell. 23. 6. 32 *Magiam opinionum insignium auctor amplissimus Plato, Machagistiam esse verbo mystico docet, divinorum incorruptissimum cultum, cujus scientiae saeculis priscis multa ex Chaldaeorum arcanis Bactrianus addidit Zoroastres, deinde Hystaspes rex prudentissimus, Darii pater.* The general opinion is that 'saeculis priscis' is allowable in consideration of the thousand years that separated Zoroaster and Ammianus and assuming that Ammianus understood Zoroaster and Hystaspes to be contemporaries, cf. Kleuker *Zend-Avesta. Anh. z. Bd. i. Theil i*, p. 334.

² Agathias 2. 24, Ζωροάστρου τοῦ Ὀρμάσπεως . . . οὗτος δὲ ὁ Ζωροάστος, ἦτοι Ζαράδης (διετὴ γὰρ ἐπ' αὐτῷ ἡ ἐπωνυμία) ὀνηνίκα μὲν ἤκμασε τὴν ἀρχὴν, καὶ τοὺς νόμους ἔθετο, οὐκ ἐνεστι σαφῶς διαγνῶναι. Πέρασι δὲ αὐτὸν οἱ νῦν ἐπὶ Ὑστάσπεω, οὕτω δὲ τι ἀπλῶς φασὶ γεγενῆσθαι, ὥς λίαν ἀμφιγνοῖσθαι, καὶ οὐκ εἶναι μαθεῖν, πότερον Δαρείου πατὴρ εἶτε καὶ ἄλλος οὗτος ὑπῆρχεν Ὑστάσπης.

³ Eutychii Patriarchae Alexandrini *Annales*. Illustr. Selden, interpr. E. Pocock. Oxon. 1658, p. 262-63 *Mortuo Cyro Dario Babelis rege, post ipsum imperavit filius ipsius Kambyzus annos novem: post quem Samardius Magus annum unum. Hic, Magus cognominatus est quod ipsius tempore floruerit Persa quidam Zardasht (زاداشت), qui Magorum religionem condidit aedibus igni dedicatus. Post ipsum regnavit Dara primus, annos viginti. Post illum Artachshast Longimanus cognominatus annos viginti quatuor.* On this authority Floigl following Rōth wishes to assign the year of Zoroaster's death to B. C. 522, cf. *Cyrus und Herodot*, p. 18, and Rōth *Geschichte uns. abendländ. Philosophie*.

⁴ Bar 'Ebhṛāyā *Arabic Chronicon* p. 88, ed. Salhani, Beirut, 1890 (cited by Gottheil, *References to Zoroaster*, p. 33). 'In those days (of Cambyses) came Zaradosht chief of the Magian sect, by birth of Adharbījān, or, as some say, of Āthōr (Assyria). It is reported that he was one of Elijah's(!) disciples, and he informed the Persians of the sign of the birth of Christ.'

(m) Finally two other allusions are here added for the sake of completeness, as they have been interpreted as pointing to the fact that Zoroaster lived about the sixth century B. C. There seems to be nothing in them, however, to compel us to believe that Zoroaster is regarded as living only a short time before the events to which they allude. The first is a passage in Nicolaus Damascenus (1st century B. C.), who represents that when Cyrus was about to burn the unfortunate Croesus, his attention was called to Ζωροάστρου λόγια which forbade that fire should be defiled.¹ The second item of information is found in such references as represent Pythagoras as following Zoroaster's doctrines.² Lastly, the association of Zoroaster's name with that of Thales, by Alfrūnī, has been noted above.³

¹ Nicolaus Damascenus *Fragm.* 65, Müller *Fragm. Hist. Gr.* iii. 409 δειμῶτα δαιμόνια ἐνέπιπτε, καὶ οἱ τε τῆς Σιβύλλης χρησμοὶ τὰ τε Ζωροάστρου λόγια εἰσφεύει. Κροίσον μὲν οὖν ἐβόων ἐτι μᾶλλον ἢ πάλαι σῶζειν. . . . Τὸν γε μὴν Ζωροάστρην Πέρσαι ἀπ' ἐκείνου διεύπαν, μῆτε νεκροὺς καλεῖν, μῆτ' ἄλλως μαινεῖν πῦρ, καὶ πάλαι τοῦτο καθεστὼς τὸ νόμιμον τότε βεβαιωσάμενοι. (Latin version) Persas . . . religio ac metus divūm incessit: Sibyllae quoque vaticinia ac Zoroastris oracula in mentem veniebant. Itaque clamitabant, multo, quam antea, contentius, ut Croesus servaretur . . . At Persae exinde sanxerunt juxta praecepta Zoroastris, ne cadavera cremare neque ignem contaminare posthac liceret, quod quum apud eos ex veteri instituto obtinuisset, tum magis confirmaverunt. Cf. de Harlez *Avesta traduit*, *Introd.*, xlv, lxvii.

² The principal references are to be found in Windischmann *Zoroastrische Studien* pp. 260-64, 274, from whose work they are taken. Several of these allusions mention Zoroaster's name directly; in others we may infer it, since Pythagoras is made a student of the Magi, whom classical antiquity regards as the exponents of Zoroaster's teaching. Such allusions are: (a) Cicero *de Fin.* 5. 29 ipse Pythagoras et Aegyptum lustravit et Persarum Magos adiit; (β) Valerius Maximus 8. 7 extern. 2, inde ad Persas profectus Magorum exactissimae prudentiae se formandum tradidit; (γ) Pliny *N.H.* 80. 1.2 Pythagoras, Empedocles, Democritus, Plato ad hanc (magicen) descendam navigavere; (δ) Porphyrius *Vita Pythag.* 41 ἐπεὶ καὶ τοῦ θεοῦ, ὡς παρὰ τῶν Μάγων ἐπινοήντο, ὃν Ἀρομάζην καλοῦσιν ἐκείνοι; and *Vita Pythag.* 12 ἐν τε Βαβυλῶνι τοῖς ἑτέροις Χαλδαίοις συνεγένετο καὶ πρὸς Ζάβρατον [Záparon, Nauck] (Zoroaster?) ἀφίκετο; (ε) Plutarch *de animae procr.* in *Timaeo* 2. 2 Ζαρότας ὁ Πυθαγόρου διδάσκαλος; (ς) Clemens *Alexandrinus Stromata* 1. p. 357 (ed. Potter) Ζωροάστρην δὲ τὸν Μάγον τὸν Πέρσων ὁ Πυθαγόρας ἐξήλωσεν (Ms. ἐδηλώσεν), cf. Cyrilus *adv. Jul.* 3 p. 87 where Pythagoras is called πανάριστος ζῆλωτης of Zoroaster; (η) Suidas s. v. Pythagoras, Πυθαγόρας· οὗτος ἤκουσε—Ζάρητος τοῦ μάγου (is it Zoroaster?); (θ) Apuleius *Florid.*, p. 19 (ed. Altib.) sunt qui Pythagoram aīunt eo temporis inter captivos Cambysae regis Aegyptum cum adveheretur, doctores habuisse Persarum magos ac praecipue Zoroastrem omnis divini arcani antistitem. (i) in Lucian's *Dialogue Menippus*, § 6, p. 468, the Babylonian Magi are the pupils and successors of Zoroaster μοῖ . . . ἔδοξε ἐς Βαβυλῶνα ἰλθόντα δεσφῆναι τινος τῶν Μάγων τῶν Ζωροάστρου μαθητῶν καὶ διαδόχων. Also some others.

B. DISCUSSION OF THE DATA.

The material above collected presents most of the external evidence that we have in regard to the age at which Zoroaster lived. We are now prepared for a more comprehensive view of the subject, for a discussion of the data in hand, for a presentation of certain internal evidences that need to be brought out, and for arguments and possible deductions. Several points immediately suggest themselves for comment.

First, in discussing the classical allusions above presented, one is justified from the connection in assuming that such allusions as are made to the name of Zoroaster as a religious teacher or sage, all refer to the one great prophet of ancient Iran. No account, I think, need therefore be taken of such views as assume the existence of two or of several Zoroasters, belonging to different periods in the world's history. Such a view was held by Suidas (s. v. *Zoroastres*) and was evidently earlier shared by Pliny;¹ it met with acceptance also among some of the old-fashioned writers in more recent times;² but there is no real evidence in its favor, and it is due to an attempt to adjust the discrepancy existing in classical statements with regard to Zoroaster's date. History knows of but one Zoroaster.

¹ Pliny *N.H.* 30. 2.3, *sine dubio illic orta (ars Magica) in Perside a Zoroastre, ut inter auctores convenit. Sed unus hic fuerit, an postea et alius, non satis constat.* He adds a little later (30. 2.8) *diligentiores paulo ante hunc (i. e. Osthane) Zoroastrem alium Proconnesium.*

² E. g. Kleuker, *Anhang zum Zend-Avesta*, Bd. I. Thl. 2, p. 68-81.

Second, among the three dates which may be deduced from the material above collected and which are summarized on p. 2, we are justified upon reasonable grounds, I think, in rejecting the excessively early date of B. C. 6000 or thereabouts. The explanation above offered to account for the extravagant figures seems satisfactory enough.

Third, such dates as might be arrived at from the sporadic allusions that associate the name of Zoroaster with Semiramis and Ninus, with Nimrod and Abraham, or with Baal, Bel, Balaam, as above discussed, have little if any real foundation. In each instance there seem to me to be reasonable grounds for discarding them.

There remains finally a comparatively large body of material that would point to the fact that Zoroaster flourished between the latter part of the seventh century and the middle of the sixth century before the Christian era. The material when sifted reduces itself: first, to the direct tradition found in two Pahlavi books, *Bundahish* and *Ardā-ī Vīrāf*, which places Zoroaster's era three hundred years, or more exactly 258 years, before Alexander's day; second, to the Arabic allusions which give the same date in their chronological computations and which in part lay claim to

being founded upon the chronology of the Persians themselves; third, to similar allusions elsewhere which place Zoroaster at about this period.

¹ Compare Al-Biruni *Chronology of Ancient Nations* p. 109, 112 (trans. Sachau): and *the Mudjmal al-Tewarikh*, p. 142, 320, 330 (traduit Mohl, *Journal Asiatique* xi., 1841) stating that the account is based on the Chronicle of Mobed Bahram.

Certain objections may be raised to a view based upon this material last given.

First among these objections is a claim often urged, that the traditional date rests upon an erroneous identification of Vishtaspa with Hystaspes the father of Darius. I cannot see, from the allusions or elsewhere, that the Persians made any such identification; the impression gained from the material presented is rather in fact to the contrary; one may recall, for example, how widely different the ancestry of Vishtaspa is from the generally received descent of Hystaspes the father of Darius (a point which Floigl and Röth seem to have overlooked). It was only the classical writer Ammianus Marcellinus who, in antiquity, made any such identification. The point has already been sufficiently dealt with above, p. 14.

A second objection may be brought on the plea that the traditional date (7th to middle of 6th century B. C.) would not allow of the lapse of sufficient time to account for the difference in language between the Gāthās and the Old Persian inscriptions and for certain apparent developments in the faith. Furthermore, that a longer period of time must be allowed to account for the difference between the fixed title *Auramazda*, Ἀπομάζδης, current in western Persia in Achaemenian times, and the divided form of the divine name *Ahura Mazda* (or *Ahura* alone and *Mazda* alone) as found in the Avesta, especially in the Zoroastrian Gāthās. This point has been noticed in the interesting and instructive paper of Professor Tiele *Over de Oudheid van het Avesta*, p. 16,¹ who comes to the result that Zoroastrianism must have existed as early as the first half of the 7th century B. C. If we accept, as I believe we should, the theses that Vishtaspa ruled in eastern Iran, and that, although Zoroaster was a native of Azerbaijan, the chief scene of his religious activity was eastern Iran,² and that the faith spread from Bactria westwards,³ I can not see that these arguments militate against the traditional date under discussion. Dialectic differences between the Bactrian region and Persia proper would sufficiently account for arguments based on language alone. This, added to national and individual differences, might well account for the fixed form of the name *Auramazda* among the Achaemenians as contrasted with the Avestan form. Who can say how rapidly the creed spread from the east to the west and what changes consequently in a short time may have resulted? New converts in their zeal are often more radical in progressive changes than first reformers. Persis, with

its original difference in dialect, may in short time have developed the single title *Auramazda* from *Ahura Mazda* as watch-word of church and state. See also note, p. 20, top.

¹ Reprinted from the *Mededeelingen der Koninklijke Akademie van Wetenschappen, Afdeling Letterkunde*, 8de Reeks, Deel xi., 364-385.

² Tiele's little work argues admirably for the antiquity of the Avesta as opposed to Darmesteter's views for the lateness of the Gāthās. I wish I could be convinced by Professor Tiele (p. 19) that the names of the Median kings, Phraortes (*fravāši*), Kyaxares (*uvahšatara*), Deiokes (**dahyuka*) as well as Eparna, Sitiparna of the early Esarhaddon inscription (explained as containing *hvaranah* 'glory'), are due to concepts originated by Zoroaster and are not merely marks of beliefs which Zoroastrianism inherited directly from existing Magism. The name of Darius's contemporary Khshathrita (Bh. 2.15, iv. 19, E 9) is not so important for the argument. I confess I should like to place Zoroaster as early as the beginning of the 7th century. The earlier, the better.

³ On eastern Iran, cf. Geiger *Ostiranische Kultur* (Erlangen, 1882) and English translation of same, Darab P. Sanjana *Eastern Iranians* (London, 1885-86).

⁴ See Jackson, *Zoroaster's Native Place*, *J.A.O.S.* xv. 230 seq. So in spite of Spiegel *Z.D.M.G.* xlv. 198 seq.

A final objection may be raised as to the real historic worth and chronological value of the Persian tradition which places Zoroaster three centuries before Alexander. This it must frankly be said is the real point of the question. Is there a possibility of Arabic influence at work upon the statements of the Bundahish and *Ardā-i Virāf*? Is the whole chronology of the Bundahish and that of the Persians artificial? And did the Zoroastrians intentionally tamper with history and bring Zoroaster down as late as possible in order that the millennial period might not be regarded as having elapsed without the appearance of a Saoshyant, or Messiah?

¹ Spiegel *Eranische Alterthumskunde* i. 506, with Windischmann, regards the data of the Bundahish as 'unzuverlässig,' but it must be remembered that his figures, '178' years for the period between Zoroaster and Alexander, now require correction to 258, which alters the condition of affairs. See West, *S.B.E.* v. 150-151, and Spiegel *Z.D.M.G.* xlv. 203. Compare especially de Harlez *Avesta traduite*, Introd. p. ccxxviii.

These questions require serious consideration in detail. The introduction to the chronological chapter of the Bundahish (Bd. 34) does indeed read, according to one MS, 'on the reckoning of the years of the Arabs' (see Bundahish translated by West, *S.B.E.* v. 149), but the word *Tāzikān* 'of the Arabs' is not found in the other manuscripts. Moreover, the scientific investigator Albīrūnī, and also the *Mujmal al Tawārikh*, whose data agree exactly with the Bundahish, affirm that the dates given for the Kayanian kings are obtained from the records of the Persians themselves.¹ There seems no reason, therefore, to doubt

that the Bundahish really represents the Persian chronology. But what the value of that chronology may be, is another matter. Personally I think it has real value so far as giving the approximate period of three centuries before Alexander as Zoroaster's era. Every student of the classics knows the part that chronology plays with reference to the Magi; every reader of the Avesta is familiar with "the time of long duration;" every one who has looked into the scholarly work of Albīrūnī will have more respect for Persian chronology. Errors indeed there may be; attention has been called above to the lack of agreement between the years assigned by tradition to the reigns of the Zoroastrian Kayanian monarchs and the generally accepted dates of the reigns of Cyrus, Darius, and Xerxes; to the dynasty of these three kings there corresponds only the long rule of Vishtaspa (120 years) and a part of that of Bahman Ardashir Dirazdast, some of whose reign answers to that of Artaxerxes Longimanus. As above said, it is difficult to identify the Kanyanians of the tradition with the early Achaemenians of Greek history, but this need not nullify the real value of the traditional 'three centuries before Alexander.' What Masūdi (c. A. D. 943) in his *Indicatio et Admonitio* can add on this subject is full of interest. Little attention seems thus far to have been drawn to this important passage and to the explanation which it contains.¹ Masūdi is fully aware of the difference that exists between the Persian and the generally accepted chronology and he shows how it was brought about by Ardashir's purposely shortening the period between Alexander and himself by causing about half the number of years to be dropped from the chronological lists, but the 300 years of Zoroaster before Alexander were allowed to remain untouched, for the old prophecy regarding the time of Alexander's appearance had been fulfilled. The passage in Barbier de Meynard is well worth consulting.²

¹ See note above, p. 8.

² Cf. Barbier de Meynard in *Le Livre de l'Indication et de l'Admonition* (Maçoudi *Prairies d'Or*, ix. 327-28).

³ See preceding note. I have since found the passage given by Spiegel in *Eran. Alterthumskunde* iii. 193; compare also Spiegel *Z.D.M.G.* xlv. 202.

C. RESULTS.

To draw conclusions,—although open to certain objections, still, in the absence of any more reliable data or until the discovery of some new source of information to overthrow or to substantiate the view, there seems but one decision to make in the case before us. From the actual evidence presented and from the material accessible, one is fairly entitled, at least, upon the present merits of the case, to accept the period between the latter half of the seventh century and the middle of the sixth century B. C., or just before the rise of the Achaemenian power, as the approximate date of Zoroaster's life.¹

¹ Since the above was written Dr. E. W. West writes me (under date Dec. 19, 1895) the interesting piece of information that his investigations into the history of the Iranian calendar have led him to the date B. C. 505 as the year in which a reform in the Persian calendar must have been instituted. He suggests that Darius, upon the conclusion of his wars and during the organizing of his kingdom and putting in force new acts of legislation, may with the aid and counsel of his priestly advisers have introduced the Zoroastrian names of the months which have supplanted the old Persian names which were given in the inscriptions. If this be so, the point may have a special bearing towards showing that the Achaemenians were Zoroastrians. From Albruf, *Chronology* pp. 17, 12; 55, 29; 205, 2; and 230, 19 (transl. Sachau), we know that Zoroaster himself must have occupied himself with the calendar. Benfey u. Stern, *Ueber die Monatsnamen einiger alter Völker*, p. 116, regarded the Medo-Persian year as having been introduced into Cappadocia probably as early as B. C. 750. [Dr. West's paper on the Parsi calendar has just appeared in *The Academy* for April 23, 1896.]

Similar results have been reached by others, or opinions to the same effect have been expressed; for example, Haug,¹ Justi (private letter),² Geldner (personal communication),³ Casartelli,⁴ and several names familiar to those acquainted with the field.⁵ Some effort might be made perhaps if the premises will allow it, and some attempts have been made, to define the period more exactly by a precise interpretation of the various time-allusions with reference to cardinal events in Zoroaster's life—the beginning of his ministry at the age of 30, the conversion of Vishtaspa in the prophet's 42d year, the death of Zoroaster at the age of 77 years.⁶

¹ Cf. Haug *Essays on the Parsis* (West's introduction p. xlv); although Haug had previously adopted various earlier eras for Zoroaster, e. g. B. C. 2300 (*Lecture on Zoroaster*, Bombay, 1865), not later than B. C. 1000 (*Essays* p. 299, where the subject is discussed; cf. also pp. 15, 186, 264).

² Personal letter from Professor Justi, dated June 14, 1892.

³ Geldner formerly placed the date of Zoroaster as prior to B. C. 1000 (see article 'Zoroaster' *Encyclopaedia Britannica* 9th edition).

⁴ *Philosophy of the Mazdayasnian Religion under the Sassanids*, p. ii. 'à bout 600.'

⁵ The best collections of material on the subject are to be found in de Harlez *Avesta traduit*, 2e ed. Introduction pp. xx-xxv, ccxiv, Spiegel *E.A.* ii. . . . , and Windischmann *Zoroastriische Studien*; the latter suggested (*Zor. Stud.* p. 164) about B. C. 1000 as Zoroaster's date. The present writer (*Avesta Grammar* p. xi.) once held the opinion that Zoroaster lived 'more than a thousand years before the Christian era.' The date assigned by the Parsi Orientalist K. R. Cama is about B. C. 1800.

⁶ E. g. Anquetil du Perron *Zend-Avesta* i. Pt. 2, p. 6, 60-62, assigns B. C. 589-512 as the age of Zoroaster; compare also Kleuker (Foucher) *Anhang zum Zend-Avesta*, Bd. i. Thl. i., pp. 327-374; Thl. 2, pp. 51-81. Floigl (*Cyrus und Herodot* p. 18), following Rôth, gives B. C. 599-522 as Zoroaster's era and identifies Vishtaspa with Hystaspes the father of Darius. Neither Floigl nor Rôth seem to take any account of the difference between the genealogy of Vishtaspa's ancestors as given in the Old Persian inscriptions and the lineage given in the Avesta, Pahlavi, and later Persian works. He does not, moreover, sufficiently take into consideration (p. 17) that 42 years (or at least 30) must be added in every instance to the 258 years before Alexander, as that was Zoroaster's age when Vishtaspa accepted the faith. This would in any event place the date of Zoroaster's birth before B. C. 600.

The above results, if they be accepted in the light at least of our present information on the subject, seem to be not without importance for the history of early religious thought and of the development of ethical and moral teaching. If one carefully works through the material, it must be acknowledged that the most consistent and the most authoritative of all the actual statements upon the subject place the appearance of the prophet at a period between the closing century of Median rule and the rising wave of Persian power, that is, between the latter half of the seventh century and the middle of the sixth century B. C. It is the sowing of the fallow land that is to bring forth the rich fruits of the harvest. The teaching of Zoroaster must have taken deep root in the soil of Iran at the time when the Jews were carried up into captivity at Babylon (586-536), where they became acquainted with 'the law of the Medes and Persians which altereth not;' the time was not far remote when the sage Confucius should expound to China the national tenets of its people, and the gentle Buddha on Ganges' bank should preach to longing souls the doctrine of redemption through renunciation. How interesting the picture, how full of instruction the contrast! And in this connection, the old question of a possible pre-historic Indo-Iranian religious schism¹ comes perhaps once again into consideration.² Certain theological and religious phenomena noticeable in Brahmanism are possibly not so early, after all, as has generally been believed. It may perchance be that Zoroastrianism in Iran was but the religious, social, and ethical culmination of the wave that had been gathering in strength as it moved along, and that was destined in India to spend its breaking force in a different way from its overwhelming course in the plateau land northwest of the mountains of Hindu Kush.

¹ The view strongly upheld by Haug.

² Deductions that might perhaps be made in the light of Hopkins, *Religions of India* pp. 177, 186, 202, 217. Consult especially the suggestive hints of Geldner, article 'Zoroaster,' *Encyclopaedia Britannica*, where the much-mooted question of *asura-ahura*, *daēva-deva*, 'god-demon,' is discussed.

The kingdom of Bactria was the scene of Zoroaster's zealous ministry, as I presume. Born, as I believe, in Atropatene, to the west of Media, this prophet without honor in his own country met with a congenial soil for the seeds of his teaching in eastern Iran. His ringing voice of reform and of a nobler faith found an answering echo in the heart of the Bactrian king, Vishtaspa, whose strong arm gave necessary support to the crusade that spread the new faith west and east throughout the land of Iran. Allusions to this crusade are not uncommon in Zoroastrian literature. Its advance must have been rapid. A fierce religious war which in a way was fatal to Bactria, seems to have ensued with Turan. This was that same savage race in history at whose door the death of victorious Cyrus is laid. Although tradition tells

the sad story that the fire of the sacred altar was quenched in the blood of the priests when Turan stormed Balkh, this momentary defeat was but the gathering force of victory; triumph was at hand. The spiritual spark of regeneration lingered among the embers and was destined soon to burst into the flame of Persian power that swept over decaying Media and formed the beacon-torch that lighted up the land of Iran in early history. But the history of the newly established creed and certain problems in regard to the early Achaemenians as Zoroastrians belong elsewhere for discussion.

ARTICLE II.

PRAGATHIKANI, I.

BY EDWARD WASHBURN HOPKINS,

PROFESSOR IN YALE UNIVERSITY, NEW HAVEN, CONN.

Presented to the Society, April, 1896.

PRAGATHIKANI, PART I.—THE VOCABULARY.

IN a preceding article, I have applied the delicate test of sacrosanct numbers to the eighth *mandala* of the Rig-Veda, with the purpose of ascertaining whether the Kāṇva collection sides more in this regard with the other family books or with those books which, to have a collective name for them, I have called the General Books (i., ix., x.)*

That the latter is the case I think I have shown very plainly. But, as I admitted in the article, the range was so small that the results obtained could be accepted only tentatively. In view, however, of the conflicting opinions in regard to the age of the Kāṇva hymns, every possible criterion becomes of value; and the significant fact, brought out in the article on the holy numbers, that in many instances the Kāṇva hymns stand side by side with the later books of the Rig-Veda and with the Atharva-Veda, may point the way to find the true age of the Kāṇvas, though by itself it is too small a fact to lead one unhesitatingly to any definitive conclusion.

In the present article I take up the vocabulary of the eighth *mandala* in its relation to the General Books and to later literature.

A full third of this *mandala* is due to late additions, as has been shown by Lanman in his estimate of the per-cent of text in the arrangement of the whole Saṁhitā. I cite his table:†

Books,	ii.	iii.	iv.	v.	vi.	vii.	viii.	ix.	x.
	.05	.06	.06	.07	.07	.09	.13	.09	.18

* The statistics appear in this Journal, vol. xvi., p. 275 ff., and in my article on *Holy Numbers in the Rig-Veda*, published in the *Oriental Studies* of the Philadelphia Oriental Club.

† The first book is omitted, because, as Lanman says, were it divided into its family collections each would come before the second book. With the Vāḷakhilya omitted, the proportion is still too great; books vii., viii., ix., numbering even then 74, 103, 77 pages (of Müller's text) respectively. See Lanman's article *Noun-inflection in the Veda*, in this Journal, vol. x., p. 578.

The amount of text alone would, therefore, predispose one to think that any general statement in regard to the antiquity of viii. must be restricted by the counter-statement in regard to its bulk, which is out of proportion to its place in the collection. Such general statements are, therefore, to be deprecated, although at present it is possible to operate only with the text as it has been handed down. Neither in postulating extreme age without reservations, as do, for instance, Ludwig on the philological side, and Hirt on the linguistic side,* nor in maintaining the opposite opinion without reservations, can historical truth be approximated. But the work has not yet been done which will enable scholars successfully to segregate the older and the later portions of the eighth book. In adducing, therefore, certain lists of words, which, in my opinion, show affinity with later rather than with earlier literature, I think it is necessary to guard against the notion that such lists prove the date of the first form of the eighth book. It will be enough, for the present, to show that lateness overlays the book in its present form, as shown by its vocabulary. But it must not be supposed that the correspondence between viii. and the General Books is all in vocabulary; or that the statistical results based on analysis of forms must necessarily be interpreted quite as they have been.

In regard to the first point, in not a few instances, viii., from a metrical and grammatical point of view, coincides rather with the General Books than with the other family books. Thus: cases of the resolution of the vowel in genitive plural of *ā* stems occur only in i., viii., ix., x. (Lanman, *loc. cit.*, p. 364); the only instance in RV. of a notable transition-form, which is common in later literature, is supplied by *bhīyāś* (*loc. cit.*, p. 373) in viii. 64. 13; † another transition-form, *ābhīruam* in viii. 46. 6 is paralleled only in x.; *ayujā* in viii. 51. 2 is paralleled only in i.; *viṣṭāpā*, another transition-form, is paralleled only in ix. (pp. 407, 462, 481); the Epic weakening of the perfect stem, found in viii. 66. 10, *emuśām*, is paralleled only in i. and x. (p. 511 ff.); and the only parallel to the accent of *parihvṛtā* in viii. 47. 6 is found in x. and AV. (p. 477). Moreover, there are certain anomalies in viii. which are far from having the appearance of antiquity, such as the elision of the ending in *yājadhvānam* in 2. 37 (the only case of this sort), and the anomalous *sandhi* of *aṣvinevā* in 9. 9; not to speak of *ūc ca āva ca* in 19. 23 (the only parallel is in x.); and the surely late *imāsyā†* of 13. 21. Not to be passed as insignifi-

* Ludwig, *Rig-Veda*, vol. iii., p. 175; Hirt, *Indogermanische Forschungen*, i. 6. Less general is the presentation of Oldenberg, ZDMG., xlii., p. 216.

† Throughout this article I cite according to Aufrecht's first edition, in order to mark clearly the words that are found only in the Vāṅkhyā. I have occasionally taken the liberty of referring to ii.-vii. as the 'early' books; more to avoid the inconvenient phrase "other family books" than to be dogmatic.

‡ The type of a host of forms that fairly run riot in Pali.—Ed.

cant is, further, the adverbial use of *adās*, found only in i., viii., ix., x., but never in the other family books; the frequency of *tātas*, a comparatively late form, whose occurrences in viii. alone equal in number all its occurrences in ii.-vii. together; and the similar state of things in respect of *paçcāt*, also a late form: viii. alone has four* out of the seventeen occurrences of this word in the RV., which are as many as are found in all the material of ii.-vii. in its present shape; while of the four occurrences in ii.-vii., one is in the confessedly late "weapon-hymn," vi. 75.

But the second point is of still greater importance. I have always held that early forms do not necessarily prove early authorship; for it is evident that, at a period when the old forms were passing away, poets that desired to give archaic effect to their productions could do so very cheaply by overcrowding their verses with metrical or formal archaisms.† Now the statistical survey from which is inferred the probable priority of viii. is based on the most striking grammatical forms, where the difference between the old and new is most pronounced, *ā* and *āni*, *ebhis* and *āis*, *āsas* and *ās*, *ā* and *āu*.

That this is not theory but fact may be strikingly shown. Everyone admits that the Vāṅkhyā hymns cannot be classed among the old hymns of the Rīg-Vēda. On the contrary, in all probability they are a late addition to the Kāṇva collection. But this is the statistical picture of these forms as given in these eleven hymns:

<i>ās</i>	<i>āsas</i> ,	<i>āis</i>	<i>ebhis</i> ,	<i>āni</i>	<i>ā</i> ,	<i>āu</i>	<i>ā</i> ,
13	15	2	5	10	8	0	17

Late as are the hymns, their old forms, even apart from the stereotyped dual, exceed the new forms. Even the *dānastuti* tags of the hymns in viii. show that the authors, while employing *ās* more often than *āsas*, keep the older *ā* as against *āni* (and *ā* as against *āu*) in a very great majority of the cases. In fact it must have been largely a matter of metrical convenience with poets who could use indifferently, not only in the same period but in the same hymn and verse, the two parallel forms side by side, as is so

* The cases in viii. are 50. 15, 16; 69. 4; 89. 1; Lanman, *loc. cit.*, p. 457.

† The tendency to revive archaic Vedic forms is not confined to the period immediately following that in which these forms obtained, but characterizes even Sanskrit literature. It might be imagined, indeed, that the preservation of *viçvā* as neuter plural in Mbhā. i. 3. 57 was due to the real antiquity of this hymn to the Āçvins (especially as Holtzmann cites *ā* as neuter plural only for this place, *Grammatisches*, p. 12). But what shall be said of a Çiva hymn that contains the same ending in the certainly late imitation of the Çatarudriya at the end of the seventh book? Here we find (Mbhā. vii. 201. 77):

bhūtam bhavyam bhavitā cāpy adhr̥ṣyam
tvatsambhūtā bhuvanānīha viçvā
bhaktam ca mām bhajamānam bhajasva
mā ririṣo mām ahitāhītena.

There can be no doubt from the character of the whole section that both form and phrases, apparently ancient, are due here simply to imitation.

often the case. In the first eleven hymns of the eighth book, not only does the dual ending *ā* stand out of all proportion to *āu* (one hundred and twenty-six cases against seven), but in the same hymns the new *ās* and *āis* endings considerably outnumber those in *āsas* and *ebhis*; while there are eighteen *āni* forms against twenty-two neuter forms in *ā*; showing that the forms are not a very satisfactory criterion of date, until a period is reached when, as in the Atharvan, the older forms are so far antiquated that the poets use them less for empty show than for convenience; preferring to remodel according to new forms which now become the standard.

Not too much weight then, in my opinion, is to be laid on the supposititious antiquity of the Kāṇva collection as evinced by statistics of forms. As is well known, by the application of the same statistical method to another class of forms, Brunnhofer has arrived at exactly the opposite result in estimating the age of the eighth book, and makes it out late as Lanman makes it out early.*

Curious confirmation of my view in regard to the value of forms has lately been afforded by Arnold's article on *Literary Epochs in the Rīg-Veda*. The author starts out with the avowed purpose of extending and strengthening Lanman's tests with a new set of forms used as new tests. But he finds not only that from this point of view the eighth book is later than the 'cognate sections,' but also that by three out of his four new tests the results are exactly the opposite of what he desired to show, and that they point to a later date for the Kāṇva collection. That the author does not renounce such tests altogether is due to his reliance on still other tests which he propounds, but which are of questionable value.†

Arnold unites his contradictory tests with Lanman's to support the proposition that viii. is older than the other family books, though he admits (p. 304) that in three out of four of his new tests book viii. has the larger proportion of later forms.‡ He

* Lanman, however, by no means postulates the early date of viii. without duly guarding against a too sweeping application of his statistics: "Our result indicates that the eighth is older than the other family books. . . . I will not lay stress on this result until the relations of book viii. to the rest have been more carefully determined" (*loc. cit.* p. 580). Brunnhofer's article *Ueber Dialektspuren im Vedischen Gebrauch der Infinitivformen* is in *Kuhn's Zeitschrift*, xxv., p. 329 ff., 374. It has been criticized by Collitz and defended by its author in *Bezzenger's Beiträge*, vii., p. 188; x., pp. 15, 234.

† This article has just appeared in *Kuhn's Zeitschrift*, xxxiv., p. 297 ff. It is a combination and extension of the methods of Lanman, in the article cited above, and of Oldenberg, in the latter's *Prolegomena to the Rīg-Veda*.

‡ It is important to notice, further, that the new forms which Arnold operates with, and which point to viii. being later than ii.-vii., are of less obvious and pronounced character than those used by Lanman. This shows clearly that the strongly marked forms continue to be used for show. The less striking changes are introduced freely at the same time that the more striking changes are used sparingly. In the latter

then adds a test of metre and a test of vocabulary. In regard to the former he admits that "words and forms are a safer guide" (p. 325). But it is the treatment of the test of vocabulary which here calls for special notice. Arnold makes two rough sets of words which he dubs respectively "older words" and "later words" and uses these as a test of date by reckoning the number of occurrences of these words in the 'Song Veda' (book viii. and its cognate sections) and in the 'Veda of Recitation' (books ii.-vii. and cognate sections). To avoid a vicious circle, the only test here of early and late must perforce be the number of times these words are found in AV. That this test is a futile one is evident. The subject-matter, as the author grants (p. 307), is the determining factor in many cases. That the list of "later words" includes *gṛān*, *varṣā*, *sarp*, *udāra*, etc., is sufficient to show the comparative uselessness of this test, and to make imperative the need of a careful examination of viii. from this point of view.

But, again, there is more to be said in favor of my view of the age of viii. than that the chief support of the opposed view is historically a weak one. And before giving the words which constitute the body of this article, I should like to point out to any reader who, on the strength of the statistics hitherto employed as a means of argument, may still be disinclined to admit that viii. can be late, certain obviously late factors in the general make-up of the Kāṇva collection.

No plainer reference to the sub-division of the people into castes is given anywhere in the Rig-Veda, with the exception of well-known passages in the tenth book, than in viii. 35.16-18:

brāhma jinvatam utā jinvatam dhīyaḥ
ksatrām jinvatam utā jinvatam nṛ̥n
dhenūr jinvatam utā jinvatam vīṇaḥ

That this hymn is not early, as Ludwig thinks,* but late, is rendered probable, moreover, by the word *dhārmavant* in verse 13 of the same hymn, employed in such a connection as to make almost certain the interpretation 'accompanied by Dharma,' a personification that takes us out of the theological sphere of the older Rik.†

Socially also as well as religiously there is historical interest in the fact that only in the eighth book among family books is known the mad *mūni* of later times. Here viii., as in the case of the holy numbers, distinctly stands with x.‡

case the older forms give the archaic effect sought for; whereas, in the former, not much is gained, and so the later forms are used as convenience dictates.

* *Der Rig-Veda*, vol. iii., p. 217. Compare RV. viii. 37.1, 5.

† Compare Scherman, *Vedensliteratur*, p. 152.

‡ viii. 17.14; x. 136. Repentance, as expressed by "turning back from sin" (*pratyāgn énasah*) is spoken of only in viii. 56.17. Compare Kaegi, *Rig-Veda*, note 106.

In religious fantasy the eighth book stands nearer than does any other family book to the General Books and to still later literature. It is, for instance, only in the eighth book that the Epic epithet of Indra, *ākhandata*, is to be found;* only here in family books is Indra so knit with the sun, the later view, that his weapon is the discus, *cakrá*;† only in the first, eighth, and tenth books is his weapon called the *āyasó vājrah*; and only in the first and eighth books is this weapon represented as 'three-edged' or 'three-pointed'.‡

It is distinctly a late view that makes Sūrya or Savitar ('sun') an Āditya. In x. 72. 8-9, the name of one of the Ādityas is Mārtānda. This view is recognized elsewhere only in i. 50. 13 (late addition to a Kāṇva hymn), x. 88. 11, i. 191. 9; and in two passages of viii. (namely 90. 11 and 18. 2, 3), where the new identification is made both explicitly and implicitly: *bān mahāñ asi sūrya bāl āditya mahāñ asi*; and further: *anarvāno hy ṛṣām pānthā ādityānām . . . tāt sū nah savitā bhāgo vāruṇo mitrō aryamā śarma yachantu*. This conception is one shared by viii. (as against other family books) with the late hymns of the General Books and with the Atharvan.§

Connection with later literature as against the earlier is seen, further, in the ascription to Indra of that mysterious "fourth name," which is spoken of elsewhere only in the tenth book and in Brahmanical literature.¶ So *purāṇāman*, 'having many names,' is an epithet of Indra found only in viii. 82. 17; AV. vi. 99. 1.

But it is not my intention to inquire from how many points of view it may be injudicious to dub viii. an 'early' book. The illustrative examples I have given will show that before this can be done the late elements must be accounted for and disposed of. These late elements do not lie in a bunch, to be thrown out, like the Vāṅkhiya, as a dynamic intrusion. They are freely sown through the book, and before explaining them piecemeal it is incumbent upon the historical student to understand in how far the points of contact with later literature cover the field of the eighth book.

* See List i. (below).

† viii. 85. 9; i. 53. 9. Compare also viii. 52. 8; 82. 4. In iv. 81. 4, 6, Indra is only likened to, and paired with, the sun.

‡ In the former paper I showed that the later AV. view of the cardinal points is represented in RV. only in the eighth book (possibly in the first). For references, see *Journal*, xvi., p. 276 ff.

§ The Atharvan goes a step farther, and while positing eight Ādityas, includes with the sun the moon, as another Āditya; AV. viii. 2. 15; 9. 21.

¶ viii. 69. 9; x. 54. 4. In Vāl. 4. 7 'the fourth Āditya'; though this has been interpreted as 'mighty' by Weber. Possibly another of the General Books recognizes the 'fourth name,' for such would seem to be the case when x. 54. 4 is compared with ix. 109. 14. The latter reads: *bibharti cārv indrasya nāma yēna viçvāni vṛtrā jaghāna*; the former: *tvām aṅga tāni (catvāri nāma) viçvāni vitse yēbhūh karmāṇi maghavañ cakārtha*.

A comparison of the vocabulary of this book with that of the General Books will be useful from this point of view. But before instituting this comparison, I shall analyse first the "lone words" of viii., meaning thereby the words of viii. that are not used in other parts of the Rik; in order first to see how homogeneous is viii. in respect of its own exclusive vocabulary; then to see whether the parallels that can be found for these words take us into earlier or later literature; and finally to discover whether the words are in general of such character as to make it probable that they would have lain unused by the authors of the other family books, had they been current in the day those authors composed. For it will be noticed at once that a great many of these lone words are current words in later literature; and it is only by seeing their mass that one can judge fairly whether it is likely that this mass was current vocabulary in an assumed period A (i. e. viii., supposing viii. to be "the eldest of all," as Hirt calls it), unknown or unused in an assumed later period B (ii.-vii.), and current again in period C (AV., Brāhmaṇas, Epic).

List I: Words occurring in RV. viii., but not elsewhere in RV.

In this section, I dispense with "viii." All Arabic numbers are to be understood as referring to book viii., except when other books are expressly cited. In this and in all following sections, each word is given with all its occurrences in the RV. The number of occurrences as given for the AV. is exclusive of occurrences in identical Rik-verses of the AV.

aṅṣumānt, thrice in 85.13-15, in the form *aṅṣumātī*; nowhere else in RV.; thrice in AV. (-*mān*, etc.).

āgu, 2.14. Compare the *ἀπ. λεγ. bhārigu*, 51.10.

ajirāy, 14.10; lone denominative from *ajirā*.

atasi, 3.13. This appears to be an early word. Compare *atasāyya*, i. 63.6; ii. 19.4 (Avestan *aṭ*?).

ātūrta, 88.7. Compare *atārta*, i. 126.1; x. 149.1; and v. 25.5; *ātūrtadakṣa*, voc., 26.1; *-panthā*, v. 42.1;* x. 64.5.

* Even apart from the Atri hymns in viii., the vocabulary of the Kāṇva *maṇḍala* often coincides with that of the Atri *maṇḍala* when it shows no correspondence with that of other family books. This subject deserves special treatment, and I can offer here only an example or two to explain why I have occasionally given a parallel in the fifth book: *yāmahā*, occurs only viii. 62.6 and v. 73.9; *yāmahūti*, only viii. 8.18; x. 117.3; v. 61.15; *hiraṇyavartanī* (dual) and *ṣubhāspatī*, of the Aṅvins, are found only in viii. and v.; *aruṇāpsu*, is used only in viii. 5.1; 7.7; 62.16; v. 80.1; i. 49.1 (Kāṇva hymn); *vāsavāna*, occurs only viii. 88.8; v. 88.6; i. 90.2; 174.1; x. 22.15; *āchokti*, occurs only viii. 92.13; v. 41.16; i. 61.3; 184.2. There are some cases where the hymns in v. that thus correspond are plainly late. Thus in the same way that viii. 8 (*yāmahūti*) corresponds to v. 61 which is a late hymn, *yāmahā* is found in viii. 62 and again in v. 73; and in this same hymn, v. 73.5, is found *ātāp*, elsewhere only in this same viii. 62.8; but *ātāpā* in i. 55.1 and *ātāpa(na)* in Smṛti alone show cases of *ā + tap*. So the *ṣrutā* compounds,

adhapriya, 8. 4, voc. Compare *kadhapriya*, i. 30. 20; *kadhapri*, i. 38. 1; viii. 7. 31.

ādhivastra, 26. 13. Compare *adhivāsā*, i. 140. 9; 162. 16; x. 5. 4; *adhivasā*, Brāh.; *ādhinirñij*, viii. 41. 10; *ādhirukma*, 46. 33. All the compounds, therefore, are in viii., i., x., or later. The verb *adhi-vas* does not occur before x. 75. 8; imitation of *adhi-dhā*.

adhivākā, 16. 5; then AV. vi. 13. 2 (with *parāvākā*) and ib. xix. 32. 9. The simple *vākā* occurs in RV. viii. 52. 4; i. 164. 24; AV. (etc.); Epic; but the tendency is to compounds. The only really early case, however, is *josavākā*, vi. 59. 4. Then come *cakravākā*, in ii. 39. 3 (late); AV.; Epic, etc.; and *dhāra-vākā*, in another late hymn, v. 44. 5 (compare *evāvādā*, ib. 10). In i., viii., x.: *upavākā*, i. 164. 8; *ṛtavākā*, ix. 113. 2; (*adhivākā*, above); *namovākā*, viii. 35. 23; AV. xiii. 4. 26; Brāh., etc.; *sūktavākā*, x. 88. 7, 8; AV. vii. 97. 6; Brāh.; etc. Later come a host, *anuvākā*, *acchāvākā*, *amṛtavākā*, *somapravākā*, *cārvākā*, *valivākā*, etc. In ii. 23. 8; viii. 85. 20; i. 100. 19, is found *adhivaktār*; in ix. 95. 5, *upavaktār*; in i. 24. 8, *apavaktār*; while *vaktār* in RV. is found only in viii. 32. 15; ix. 75. 2; x. 61. 12; and the late vii. 104. 8; once in AV.; but frequently in Smṛti. The verb *adhi-vas* occurs but twice in all the other family books combined; but in viii. alone, four times. Later than RV. are all other *vaktār* compounds.

adhvagā, 35. 8 (AV. *adhvagāt*); Brāh.; Epic word for traveller; Grassmann, as birds, combined with *haṁsā*! 'Like two wayfarers' is the meaning; compare ii. 39. 3, *rathyēva* after *cakravākēva* as here *adhvagā* *iva* after *haṁsā* *iva*.

ānatībhuta, 79. 3; the vicious product of a corrupt age.

ānābhayin, 2. 1. No such form in Vedic literature; *ābhīla* (Epic) is the only parallel (*ā bhī*).

ānistṛta (*āniḥstṛta*), 33. 9; then AV. vii. 82. 3.

ānuṣṭuti, 52. 8; 57. 7. Compare *anuṣṭūbh*, only in x. 124. 9; 130. 4; *anubhartrī*, i. 88. 6; *ānugāyas*, viii. 5. 34.* The verb *anu-stu* occurs twice in viii. (3. 8; 15. 6); but only once in the early books, withal in v. 73. 4 (see note above).

[*anūcānā*, Vāl. 10. 1; Brāh. The hymn is perhaps interpolated.]

antarābharā, 32. 12. The compound *antarā* (*antār ā*) occurs but once in family books, iii. 40. 9; often in other books.

ānya, only in i. 10; 27. 11; then AV. xi. 4. 23, etc.

āpākacakṣas, 64. 7; *upākacakṣas*, 6. 25. The nearest analogue in family books is *viṣvācakṣas*, vii. 63. 1 (i. 50. 2, etc.).

apācyā, 'western,' 28. 3; Brāh. (*āpāc* and *apācīna*, both viii. and early books).

so common in the Epic, occur only in x. (*ṛutārṣi*), in viii. (*ṛutākakṣa*; *ṛutārvan*, this also in x.; and *ṛutāmagna*); in i. (*ṛutāratha*); and in v. (*ṛutāratha* and *ṛutavid*), in v. 36. 6; and 44. 12. But both 36. 6 and 44 are late (vs. and hymn)!

* For *anusvāpam* see *anukāmā* in List v. (below).

āprahita, 88. 7; AV.

āproṣivāṇs, see *pravāśā*, below.

apsujā, 43. 28 (Agni); then AV. x. 4. 23 (snake); Çat. Brāh.

Compare in family books, *abjā*, vii. 34. 16; *apsuśād*, iii. 3. 5 (*apsuśīt*, i. 139. 11); and in List vii. below, *apsujit* (like *gravojit*, only in 32. 14).

abhrātṛvyā, 21. 13; as in Brāh. Compare *ayujā*, āp. λεγ., 51. 2; and *asapatnā*, x. 159. 5; 174. 5 (AV. etc.).

amativān, 19. 26 (*āmati*, vii. 1. 19; v. 36. 3; x. 42. 10 etc.).

āmbara, 8. 14 (where *āmbare* replaces *turvāge* in the same verse, i. 47. 7). This is a common word in later literature. As opposed to *parāvātī* it means the enveloping, surrounding, air, *antārikṣe* (which is one of the Epic meanings of *āmbara*), as in 10. 6: *yād antārikṣe pātatah purubhujā yād vemé rōdasi ānu*; 9. 2: *yād antārikṣe yād divi*. The etymology is doubtful, but if it be *ānu var* it is worth remarking that this combination occurs neither in RV. nor AV. But it does occur in the Brahmanic and Epic periods. In i. 100. 17, *ambartṣa* is a proper name.*

āyahçīrṣan, 90. 3, epithet of the gods' messenger. Compare (the only parallel) the Epic demon, *ayahçīras* by name.

ayujā, see *abhrātṛvyā*, above.

aratvā, 46. 27. In AV. xx. 131. 18 first occurs *āraṭu* (*parṇa*) or *āraḍu*; later *aratu* (*dandu*).

ārāya, 50. 11. Compare *arāya*, of the *kanvajāmbhanī*, in AV. ii. 25. 3. The AV. poet says the *kāṇva* is *arāya*; the Kāṇva says he is not *ārāya* (retort?).

aristutā, see List iii. (below).

arvāké, 9. 15. The parallel forms *āpāke*, *parāké*, *upāké*, *nireké* occur in other family books.

avabhṛthā, 82. 23; AV.; Brāh. Late word, and here in its usual meaning.

avāryā (*kratu*), 81. 8. With this sense and accent the word is post-Vedic. For the compound, compare *aviharyatakratu*, only in i. 63. 2. In this sense *vārya* itself is Epic (compare Epic *durvārya*).

avicetanā, 89. 10, 'unintelligible' (*vicetana* is Epic, but in the same meaning, 'senseless,' just as Vedic, *vicetas*, 'wise,' becomes 'foolish' in Epic. Compare *vīmanas* in List ii.).

avódeva, 19. 12. This appears to me to be a new form, like *arvāgvasu*, VS., but it may perhaps be old.

açāsyā, 33. 17; in i. 189. 7 (and Epic), *çāsyā*.

āçna (*āçna*, 'eating' occurs in an early passage) = *āçan* (*āçman*), 2. 2 (on the other hand, *āçman* is 'eating' in AV. xviii. 4. 54). This *āçnāis* is a late form, parallel with *pārvāhné* (which occurs only in x. 34. 11, Brāh., etc.); and with *anasthā*, viii. 1. 34. Compare Lanman, *loc. cit.*, p. 527.

* The antithesis (?) of *parāvātī* and *samudré* in 12. 17 might raise the question whether *āmbara* could mean water. Compare *ambu* in later literature and *kiyāmbu*, RV. x. 16. 13.

agvapati (with *urvarāpati*, *gōpati*, *sōmapati*), in voc., 21. 3. Copied perhaps from ii. 21. 1 (*agvajit*, *urvarājī*, *gojī*).

āgvapr̥sthā, 26. 24. Formed like the Epic *kīrmapr̥sthasamā bhāmih*, Mbh. xii. 318. 6, 'bare.' So here 'sharp,' with Pischel, ZDMG. xxxv. 712 (compare *kharājru*), unless rather the 'horse' is Soma itself; as in 52. 2, where the press-stones are 'soma-backed' (*sōmapr̥sthā*, viii. 43. 11; 52. 2; x. 91. 14; AV.; etc.). Another *āraṣ* formation of this sort is *pr̥dākusānu*, 17. 15.

astāpadi, compare *nāvasrakti*, below.

āsāndina (= *āsāndita*), 91. 14.

asuvā (= *āsuvant*), 14. 15; but apparently not a late form;* compare *hinva*, below.

ahamsana, voc., 50. 9; compare *ahamya*, i. 167. 7.

āhita, 51. 3; Brāh.; Smṛti. Chiefly late is *hitā*, 'dear,' 'agreeable.' See under *hitā*, in List vi., below.

ahnāvāyyā (A.F. 3. 20), 45. 27 (*hnu* only in i., viii.).

ākhaṇḍala, voc., 17. 12. This is an Epic epithet of Indra (as here in RV.). Compare Mbh. xiii. 14. 75: *viṣṇoḥ cakram ca tad ghoram vajram ākhaṇḍalasya ca*. AV. merely repeats RV. (AV. xx. 5. 6). Even the root appears later than RV., AV.

ājikī, 45. 7, of Indra, as in *ājītūr*, only Vāl. 5. 6; *ājipati*, only Vāl. 6. 6.

ātūc, 27. 21; like *āpitvā*, 4. 3 (20. 22; 21. 13), is perhaps old (it may be a reduced form of *tvāc*), but it stands without parallel.

ātura, 20. 26; 22. 10; 61. 17. There is no other case in RV., and but one in AV., vi. 101. 2, for this is chiefly an Epic word. The negative is found in viii., i., x. (List iv., below); and each of the three hymns where it occurs in i. and x. is late (hymn to press-stones, hymn of physician, x. 94 and 97; hymn to Rudra, i. 114).

āpitvā, see *ātūc*, above.

ābhaga, Vāl. 5. 6; i. 136. 4; x. 44. 9; AV.

āyantār, 32. 14. Compare *niyantār* below, under *nidhānyā*. The verbal compound, current in post-Vedic works, occurs rarely in early family books (once in the third, twice each in the fourth and sixth, not at all in the second, fifth, and seventh books),† but often in the eighth book: *ā yamat*, 11. 7; 81. 3; *ā yachanti*, 4. 2; *ā yachantu*, -*atu*, 32. 23; 34. 2; *ā yatas*, 81. 7; *ā yāmaya*, 3. 2; and in further composition, *abhī ā yaman*, 81. 31. In this regard viii. stands with the later use of *ā yam*, which is already exemplified in i., ix., x., where are found *ā yamat*, ix. 44. 5; x. 14. 14; *ā yachantu*, i. 130. 2; *ā yatas*, x. 130. 1; *ā yāmayanti*, i.

* In early family books are found *asinvā*, *jinva*, and *inva* (in compounds); in ix., *pinva*.

† iii. 6. 8; iv. 22. 8; 32. 15; vi. 23. 8; 59. 9 (*ā prā yachatam*).

162. 16; *samā yamus*, x. 94. 6. The noun *āyantār* is not found elsewhere, but other derivatives are cited, *āyamana*, *āyamyā*, from *Ūpan.*, and Epic literature respectively.*
- āyāna*, 22. 18; Epic. Meaning 'way' *yāna* itself is found x. 110. 2, Brāh., and Epic; meaning 'vehicle,' iv. 43. 6, and Brāh. Of the other compounds only *prayāna* and *devayāna* occur in the family books. There are a number belonging to the first and tenth books, and to AV.: *pitryāna*, x. 2. 7; AV.; *niyāna*, i. 164. 47; x. 19. 4; 142. 5; AV.: *avayāna*, i. 185. 8; AV.; *udyāna*, *pūryāna*,† *rathayāna*, AV. (with *rathayāvan*, RV. viii. 38. 2). Still later come *svargayāna*, Ait. Brāh., *goyāna*, *upayāna*, Smṛti., etc., etc.
- ārokā*, 43. 3; Çat. Brāh. In Nir., *ārocana*. The verb *ā-ruc* (Avestan) appears in early books, as also do *rōka* and *rokā*. The base of *ārokā*, therefore, is prepared for it early, but the word itself it of the period viii.—Brāh.
- ārksā*, 57. 16; 63. 4, 13; Epic patronymic.
- āvṛtvant*, 45. 36 (*āvārtana* x. 19. 4, 5). In the early books, *āvṛt*. Compare note on *paragumānt*, below.
- āsaṅgā*, see Note below, at the end of this article, p. 89.
- āsāva*, 92. 10, may be old.
- āhā*, 32. 19; VS. 24. 38.
- itthām*, 59. 14. Later a very common equivalent of *itthā*, but only here in RV. (four times in AV.; then Brāh., Smṛti, etc.).
- ukthavārdhana*, 14. 11 (with *stomavārdhana*, also *āmaṣ*). An excellent example for viii. There are forty-seven *vārdhana* compounds, of which six are in RV., whence they rapidly increase in number (four new ones in AV.). Two of the six are in this verse *ukthavārdhana* (the idea being in i. 10. 5), and *stomavārdhana*, both found only here. Of the four remaining, one, *dyumnavārdhana*, is in ix. 31. 2; another, *nṛṇnavārdhana*, is in ii. 36. 5; another *paṣuvārdhana*, is in ix. 94. 1; and the last, *puṣṭivārdhana*, is in i. 18. 2; 31. 5; 91. 12; vii. 59. 12. That is to say, every instance of this formation, popular in all post-Vedic times, is in non-family books or in late passages of family books; for none will deny that vii. 59. 12 is "ein gar nicht hierher gehöriger Vers," who considers the whole hymn and the late *tryāmbaka* of this verse; while ii. 36 contains a list of priests quite unknown to the rest of the Rig-Veda, and is as a whole a late hymn.
- ukṣanyū*, 23. 16; *ukṣanyāyana*,† 25. 22; *ukṣany*, 26. 9.

* The combination with new prefixes grows rapidly. AV. has more than half a dozen *āyam* forms and adds *ud ā*, *nir ā*, *vi ā*; later come *upā*, *abhi sam ā*. It is of course a matter more of use than of possession.

† xviii. 1. 54 (v. 1. for *pūrvyebhīḥ*); ib. 4. 63 independently.

‡ With this patronymic compare *kāurayāna* and *kāṇvāyana* in 8. 21 and Vāl. 7. 4, respectively.

- ukṣāṇna*, 43. 11; of Agni, associated with *vacāṇna* (compare also *drū-anna*, ii. 7. 6; vi. 12. 4; x. 27. 18), and with the phrase *sōmaprsthāya vedhāse*, which occurs in x. 91. 14 (with which viii. 43. 11 should be compared).
- ugrābāhu*, 20. 12; 50. 10; twice in AV. Of other *ugrā* compounds in RV., *ugrāputra* (in Brāh., *ugraputrā*) is found viii. 56. 11; *ugrādhanvan*, x. 103. 3 and AV.; *ugradeva*, i. 36. 18 (Kāṇva hymn). In AV. and later literature there are several such compounds; none in the family books of RV.
- uccācakra*, 61. 10. Compare *uccābuddhna*, i. 116. 9 (no other similar compound), and *nīcakra*, viii. 7. 29.
- udayā*, 41. 2; meaning 'origin,' post-Vedic.
- upajihvikā* 91. 21; then AV. xx. 129. 20. All other compounds of the diminutive *jihvikā* and *upajihvā* are late post-Vedic.
- upārimartya*, 19. 12. Compare *upāribuddhna*, x. 73. 8 (no such compound in ii.-vii.).
- upahāsvan*, 45. 23. Late Brahmanic combination (*upa has*). See Note below, at end of article, p. 78.
- upākācaksas*, see *āpāka*, above.
- ubhayaṁkarā*, 1. 2. Compare *abhayaṁkarā*, x. 152. 2; *kiṁkarā*, *vanamkarā*, AV. This sort of compound is late. Compare the others: *khajamkarā*, i. 102. 6 and Brāh. (but *khajakṛt* is early); in the Epic, *priyamkara*; classical forms, *ṛimkara*, *mohamkara*, *meghamkara*, *vacamkara*.
- urvarāpati*, in voc., see *aṣvapati*, above.
- ṛnākāti*, see *kāmakāti*, below.
- ṛtayā*, see *ūrā*, in List ii. (below).
- ṛtaspati*, 26. 21. This seems to be a late form (by analogy).* The old word is *ṛtapā*.
- ṛtvīyāvant*, 8. 13; 12. 10; 69. 7: see *paraçumānt* (below).
- ṛdūpā*, 66. 11, of Indra: *ṛdūpé cid ṛdūvādhā*. According to PW., for *mṛdūpā*, 'sweetness-drinking.' Compare *madhupā*, 22. 17: *madhuvādh*, x. 75. 8. But, as *mṛdu* neither occurs in RV. nor means sweetness, this is probably not the right explanation. In viii. 48. 10; ii. 33. 5; iii. 54. 10 occurs *ṛdūdāra*,† and this is probably the same word; not, therefore, late.
- ṛṣibandhu*, 89. 6. Compare *devābandhu*, i. 162. 18; *amṛtābandhu*, x. 72. 5. *Viprabandhu* is the author of v. 24. 4; x. 57 ff.
- ṛṣivas*, voc., see List ii. (below).
- ekarājī*, 37. 3; AV.; Brāh.; Epic.

* For example, with *ubhāspatī*, a favorite of viii. (s. *ātūrta* above). According to PW. and Grassmann, it is a contraction of *ṛtāsya patī*. Compare also *rāhaspati*, in voc., 50. 14, *āp. ley*.

† Compare *apō dārdar*, iv. 16. 8; *ādardar utsam*, v. 82. 1. In viii. 32. 18, *ā dardirac chatā sahasrā* (see *godari* below); but regularly not of general gifts, but of water or its holder as in *gōdhāyasam vi . . ādardah*, x. 67. 7. So when *vāja* is the object, it means the water which is to burst out; and Grassmann's etymology seems correct.

edhatū, 75. 3; twice in AV.; Brāh., etc. Despite LF. ii. 31, *edh* is probably from *ardh*. The verb *edh* occurs but twice (once) in other family books, four times in viii. alone, four times in x., and once in i. (Kāṇva hymn). Its peculiar province is in post-Rik literature, especially Epic.*

evāthā, 24.15; unique extension of *evā*. See final Note, p. 81.

ōjasvant, 65. 5; AV. See *paraśumānt*, below.

ōjodā, 3. 24; 81. 17; Tāitt. S.

odanā, 58. 14; 66. 6, 10; common in AV. and subsequent literature. See *vyōdana*, below.

kanyānā, 35. 5. Old or new formation?

karnagṛhya, 59. 15. Compare TS., *karnagṛhātā* (PW.).

karnagōbhana, 67. 3. Important because *gobhanā* is a Brāh.-Epic word, occurring neither in RV. nor in AV. Moreover, ear-rings are mentioned in no other family book; only in i. 122. 14, and possibly in i. 64. 10. Rings on neck and wrist alone are worn in the earlier period. Compare the *āraṣ* *λεγόμενον gubhrakhādayas* (voc.) in 20. 4.

kālā, 47. 17; with *gaphā*, q. v., below.

kavitvanā, see *janitvanā*, below.

kācāvanti, *kaṣaplakātū*; see List iii. (below).

kānukā, 66. 4. Roth connects with *kanūkayāntīs*, in x. 132. 7.

kāmākāti, 81. 14, compare *ṛnākāti* 50. 12; and later *kāmākāmin*, Epic; *kāmākāma*, Tāitt. Ār.; Epic.

kṛtja and *mṛkṣā*, 55. 3. Compare *mṛkṣakṣṭvan*, also *āraṣ*, 50. 10, of Indra. Early, vi. 6. 3; 18. 2, is Indra's by-name *tuvi-mṛakṣā*.

kunḍapāyya, 17. 13. Compare (?) *kunḍṛnāci*, i. 29. 6. The word *kunḍā* is late; and appears only here in RV., though in AV., and common later (Sūtra, Epic).

kumārakā, 30. 1; 58. 15; AV.; Brāh.; Epic. See *putrakā*, below. That *kumārīn* occurs only in 31. 8 (Brāh., *kumārī*) is doubtless chance.

kuhayā, 24. 30 (and, voc., *kuhayākṛte*), unique extension of *kūha*, by false analogy; compare *ubhayā*, etc., pronouns and substantives. So, later, *ihatra* is made in the same fashion.

kṛtī, 79. 6; AV.

kūd (*kāl*), 26. 10; Āit. Brāh.

kūla, 47. 11; Brāh.; Epic ('hill, bank').

kṛtādvasu, 31. 9, see *pratādvasu*, List iii. (below).

kṛpay, see List ii. (below).

kṛṣṇāvartani, 23. 19; AV. Compare *gāyatrāvartani*, 38. 6; VS.; also *raghūvartani*, viii., ix.; and *rudrāvartani*, viii., i., x.†

* One of the two cases in the other family books is in the late vi. 47. 16. The other is in iii. 25. 5. The case in i. is i. 41. 2; those in viii. are 27. 16; 46. 5; 63. 4; 73. 9.

† Other compounds are *divivartani*, x. 61. 20; *hiraṇyavartani*, in both early and late books.

kāūrāyāna, 3. 21, nom. prop., for *kāūrāyana*; related to *kāru* as is *kānvāyana*, Vāl. 7. 4, to *kānva* (?).

gambhīracetas, 8. 2, voc. Compare *gambhīrācaṇsa*, vii. 87. 6; -*vepas* in x. 62. 5 (i. 35. 7).

gārgara, 58. 9; *gārgarā* (*apām*), AV. iv. 15. 12; ix. 4. 4. In the Epic *gargara* the original idea lingers faintly. Noise is at the bottom of it, as in the (specially developed ?) *βάβυρος*. Here with *pīngā*.

gāldā, 1. 20. Not an earlier but a later form of *garda* as in *gardabhā*, whose noise (*vāc* not *gāluna*) Indra dislikes (i. 29. 5). But Pischel, VS. i. 82 ff., unites *gāldayā girā* correctly. Compare Avestan *gared*.

gāyatrāvartani, see *kṛṣṇa*, above.

guspūtā, 40. 6; AV.; Brāh.

gūrdhaya, 19. 1; lone development of *gur*. In Vāl. 2. 5, *gūrti* is common to i., ix., x. (in the same verse of Vāl. occurs the ἀπαξ λεγόμενον *svadāvan*, pun and artificial).

godatra, 21. 16; *godari*,* 81. 11; *godūh*, Vāl. 4. 4; i. 4. 1; 164. 26; AV.; *gopayātyam*, 25. 13, must be from (Epic) *gopay*, not from earlier (RV.) *gopāy*; *gōbandhu*, 20. 8. With the last compare *gōmātar*, i. 85. 3, of the Maruts. Both are synonyms of *pṛcñimātar*. This last also is apparently not a very old word. At any rate, it occurs only in i., viii., ix., and v. 57. 2, 3; 59. 6. With the *bandhu* part of the compound, compare the ἀπ. λεγ. *vājabandhavas*, voc., 57. 19; *ṛṣibandhu*, above; *abandhū*, List iii. (below).†

caturyūj, 6. 48. Compare in allegory ii. 18. 1, *cāturyuga*.

carmannā, 5. 38; VS. Compare Vāl. 7. 3: *cārmāṇi mlātāni*. In ii. 35. 13, *ānabhimlātavarṇa*. 5. 38 is *dānastuti*.

cāratha, 46. 31; *cēru*, 50. 7 (*nīcerū*, i. 181. 5). The parallel (*māhi*) *keru* occurs in i. 45. 4, hymn of Praskaṇva. The form *cāratha* is in a *dānastuti*; and hymn 50, to judge by *jālhu* in vs. 11, is late.‡

cikītvān and *cikītvīnmanas*, see *cikī* in List ii. (below).

citrāvāja, see List ii. (below).

chardispā and *jagatpā*, 9. 11 (with *paraspā* and *tanūpā*). Of the four, the two first are unique. Like Epic *jagatpati* is *jagatpā*, but the idea is old, *jāgataḥ pātih*, etc.

jatru, 1. 12; once (again) AV.; also in later literature.

jālhu (see PW.), 50. 11. Like later *jadā*.

* Both voc. Compare *ṛdūdāra*, which is old and correct; while *godari* seems to be an incorrect imitation (see note above, under *ṛdūpā*; and compare *purandharā*).

† Two *bāndhu* compounds are common in the early books, *sābandhu* and *subāndhu*; two are solitary, *yajñābandhu*, in iv. 1. 9, and *pūtābandhu*, in vi. 67. 4. The other nine, *abandhū*, *amftābandhu*, *ṛṣibandhu*, *gōbandhu*, *devābandhu*, *dvībāndhu*, *vājabandhu*, *samānābandhu*, occur only in viii.; i.; x.; viii., i.; or, *mṛtyubāndhu*, viii., x.

‡ Unique but unimportant are *carāṇi* and *carīṣṇūdhūma* in 24. 28; 28. 1, respectively.

janitvanā, 2. 42 (late verse?). The forms show in viii. a growth of the *tvānā** ending. The list of forms may begin with the Avesta, which, however, furnishes but one parallel, *nāirithwana*. Then in vi. 51. 14 occurs *sakhitvanā* (also in viii. 12. 6); in vii. 81. 6, *vasutvanā* (also in viii. 1. 6; 13. 12; Vāl. 2. 6); and in ii., iv., v., vi. there are several occurrences of *mahitvanā*, which is also found once in ix., thrice in i., and twice in viii. (i. 85. 7; 86. 9; 166. 12; ii. 23. 4; iv. 36. 3; 53. 5; v. 54. 5; 55. 4; 81. 3; vi. 16. 20; viii. 24. 13; 57. 2; ix. 100. 9).† The forms in the other family books are, therefore, few; and if *sakhitvanā* at vi. 51. 14 be in an added verse, as seems likely, there would, in fact, be but two examples of this formation in the early books. On the other hand, viii. alone has *kavitvanā*, 40. 3; *janitvanā*, 2. 42; *martyatvanā*, 81. 13; *mahitvanā* (above); *vasutvanā* (above); *vṛsatvanā*, 15. 2;‡ *sakhitvanā* (above). One other new example, *patitvanā*, is found in x. 40. 9. It is further to be remarked that the *tvā* form of these same words is not found in the family books, with the exception of *sakhitvā* (iii. 1. 15; iv. 25. 2; viii. 7. 31; 21. 8; once each in i. and x., four times in ix.). Of all the cases, only one, *vasutvā*, x. 61. 12, has a verbal parallel in the Avesta, *vanhuthwa*.§ The *tvā* form of *martyatvanā* in viii. is not cited from Vedic literature; that of *kavitvanā* and *janitvanā* occur in x. 124. 7; 18. 8, respectively; while *patitvā* (to *patitvanā* in x.) is found only in i. 119. 5 (and Epic). Against the supposition that viii. shows earlier forms, rather than a revival and imitation of the old, stand the two examples in probably late verses (vi. 51. 14; viii. 2. 42), and the example in x. 40. 9. It is another example of a moribund ending manipulated to give archaic effect by late poets.

jāmātar, see List iii. (below).

jāvant, 83. 5. Compare *vijāvant*, AV. ix. 3. 13 (*vijāvan*, in different sense, RV. iii. 1. 23).

takvā, 58. 13. The apparent analogues, *tāku*, *tākvan*, *takvavī*, *tākavāna*, *takvaviya*, are all in i., ix., x. The verb occurs once in vi.; otherwise in ix., x.

tadīdartha, 2. 16 (repeated AV., xx. 18. 1). Compare *kādartha*, x. 22. 6. The nearest verbal approach is in *tād īd ārtham*, ix. 1. 5 (compare x. 106. 1), and ii. 39. 1. The last is a late hymn.

* See on these forms, Whitney, Gr. §1240; Jackson, Gr. §§792, 847.

† In viii. 25. 18, Grassmann proposes to read *mahitvā* as *mahitvanā*, to get the requisite form syllables. This is effected by Lanman (*loc. cit.*, p. 335) through resolution, *mahitvā*.

‡ Why PW. calls this form an instrumental of *vṛsatvā* (i. 54. 2, 91. 2) is not obvious. It is exactly like *kavitvanā*, which, according to PW., is the instrumental of *kavitvanā*. Grassmann erroneously groups *satvanā* with the *tvānā* endings.

§ But the Avesta has five examples of *thwa* as a secondary ending. Since *āstaothwana* reverts to *staothwa*, and this has a primary ending, it is not comparable with *nāirithwana*.

tanūkṛthā, see *tanūkṛt*, in List iii. (below).

tandrayá, 81. 30, from (Brāh.) *tandray*.

tāmiśīci, 48. 11; AV.; *tāmis*=*tamas*, as *māhis* (in *māhiṣvantam*) = *māhas*.

tār, Vāl. 7. 2; Epic, *tāra*.

tarasvin, 86. 10, 12; VS.; common Epic word.

taruṣy, 88. 5 (*tārus* in iii. 2. 3).

tard ā, 1. 12. It is perhaps worth mentioning that the combination *ā tard*, though not infrequent after RV., occurs in RV. only here; *ānu*, *abhī*, *pāri*, *prā*, being used elsewhere in RV.

taviṣṭyá, 7. 2; 23. 11.

tugryāvṛdh, 1. 15; 45. 29; 88. 7. Compare the ἀπ. λεγ. *kavi-vṛdhā*, 52. 4.

túgvān, see *svāstu*, below.

tuvikūrmīn (for *tuvikūrmī*), voc., 55. 12; *tuvikrato* (voc.), 57. 2; *tuvikṣā*, 66. 11.

tuvīdeṣṇa, 70. 2; *tuvimātrā*, ib. with *tuvikūrmī*, *tuvīmāgha*.

tārñāṣa, 32. 4.

tṛprās (plural), 2. 5; AV. vii. 56. 3; Brāh. Perhaps synonym of *āṣá* (as in AV.), which is used of *soma* only in viii., i., ix. *tvāmkāma*, 11. 7. Compare *tvānīd*, 59. 10; *yātkāma*, x. 121. 10; and AV. *mām kāmena*.

dadhrsvāni, 50. 3. Compare *cuṣukvāni*, 23. 5; *jugurvāni*, i. 142. 8; *tuturvāni*, i. 168. 1. These are the only parallels.

daṣagvīn, 1. 9. Compare *ṣatagvīn*.

dāsmya (for *dasmā*), 24. 20.

dātra, 67. 10; Sūtra; Epic.

dānavant, 32. 12; Epic.

dāguri, 4. 12; *ādāguri*, 45. 15. Compare, in early books, *jāsuri*, *sāhuri*.

dirghāprasādman, 10. 1; 25. 20. Compare v. 87. 7 (late), where the idea is given: *dirghām prthū paprathe sādma pārthivam*.

dirghāyo (voc.), 59. 7; 'transition-form,' Lanman, *loc. cit.*, p. 573.

duṛonayá, 49. 19 (early, *duṛoná*).

dyugāt, 86. 4; 'dyumāt' (PW.).

dvitá (with *tritá*), 47. 16; nom. prop.

dhārmavant, 35. 13; personification, Dharma in late sense.

dharmakṛt, 87. 1.

nākim, 67. 4, 5 (*mākim*, 45. 23 and vi. 54. 7).

naḍá (= *nardā* ?), 1. 33 (half a dozen times in AV.; compare RV. x. 135. 7, *nāḍī*), in a *dānastuti*.

nābhasvant, 25. 6; twice in AV.; and later. The early and late meanings are connected as 'stormy,' and again as 'storm-wind,' the Epic meaning (see *paraḥumant*, below).

namovāká, see *adhivāká*, above.

nāryāpas, 82. 1; one of several compounds in viii. that express concisely an old idea, here the idea of e. g. vii. 21. 4; viii. 85. 19-21.

nāvasrakti, 65. 12, with *aṣṭāpadī* (*vāc*).

nāvīṣṭi, 2. 17; an old word?

nānṛta (= *nāsatyā*), 51. 12 (but of Indra). In 26. 8 occurs, as
 ἄν. λεγ., *īndranāsatyā*, dual!

nīcakra, see *uccācakra*, above.

nīdhānyā, 61. 18.—*nīdhārayā*, 41. 4.—*niyantār*, 32. 15; the last
 also Epic, etc. Compare *āyantār*, above.

nirmāj, 4. 20; an old word?

nivarā, 82. 15. Observe that the combination *nī var*, common in
 the Epic, is really used in RV. only here and in i. x.; for iii.
 29. 6 (*ānīvrta*) is late.

niṣṭūr, 32. 27; 66. 2.

nṛṣāh, 16. 1 (*nṛṣāhya*, vi. 25. 8).

nēd=*nā id*, emphatic, 5. 39 (*dānastuti*), and AV. Elsewhere in
 RV. *nēd*=*iva* μῆ. This prohibitive use is found in v. 79. 9;
 x. 16. 7; 51. 4; AV. The use of *nēd* as in viii. is also
 Brahmanic, but so is the prohibitive.

nyāñcana, 27. 18; twice in AV.

patidvīs, 80. 4.

paramajyā, 1. 30; 79. 1. Though not uncommon in later literature,
 all other *paramā* nominal compounds than this are later
 than RV. As a noun, in this sense, *jyā* occurs only here;
 earlier in *jyāyāns*. Ludwig, RV. iii., p. 159, takes the com-
 pound as nom. prop.

paraṣumānt, 62. 17. New *mant* and *vant* adjectives form rather
 a feature of viii. Compare *añcumānt*, *āvṣtvant* (45. 36),
rtvīyāvant (three times, see above), *ōjasvant*, *kanvamānt*
 (2. 22), *kācāvant*, *jāvant*, *dānavant*, *durhānāvanti* (2. 20;
 18. 14), *dhārmavant*, *nābhasvant*, *pustāvanti* (45. 16), *bāndh-
 umant*, *vibhumānt*, *viśnuvant* (35. 14), *sacanāvant* (22. 2),
sārasvatīvant (38. 10), *harṣumānt* (16. 4), which makes in all
 nineteen* of these forms found nowhere else in RV., though
 several of them appear in later literature. In this regard
 viii. stands nearer to x. than does any other of the family
 books; much nearer, withal; for of such forms the tenth
 book has thirty-nine; the first book, twenty-four; the eighth
 book, nineteen; the sixth book, eleven; the third, fifth, and
 ninth books, eight each; the fourth and seventh, seven; the
 second, four.† It is reasonable, it seems to me, to suppose
 that such forms, when once used, would be repeated; so that
 those earliest used would stand little chance of remaining
 unimitated. And such appears to be the case, for there are
 nearly three hundred adjectives with this ending in the Rig-

* In 2. 28, *rṣīvas*, voc., is assigned to *rṣīvan*, but it may belong here.
 The fem. *rṣīvatī* occurs in Pān. schol. (PW.).

† There may be some omissions in Grassmann's list of *mat* and *vat*
 forms, on which I rely in the case of the other books, so that the inter-
 relation of these other books may not be exactly in accordance with
 the order given below. But it is scarcely possible that forms enough
 have been omitted to alter materially the proportion between viii. and
 the other family books in the number of lone forms.

Veda, so that the numbers above, which represent isolated cases, are proportionally few. This may be surmised also from the fact that most of the solitary words of this sort are in the tenth book, too late to be copied. The greater number of these words are repeated in different books, sometimes very often. With the Vāḷakhilya omitted, which has not been included, the length of no one family book is so out of proportion with viii. as to account for the excess in the latter of these forms. For this reason it seems to me right to explain the phenomena by the reason just stated, viz. (there are more unpeated lone forms in viii.) because viii. comes after the other books; and to see in the likeness of viii. to x. in this regard the straw which shows the wind.*

Interesting corroborative evidence is furnished from another point of view. If one were asked the reason why so Epic a word as *bālavant* occurs in RV. only in x. 145. 1, one would perhaps say that it is mere hap. But why do *kakūdmant*, *kārnavant*, *cākṣuṣmant*, *pārasvant*, *māhasvant*, *viśvant*, *śōmavant*, and especially *ānnavant*, *pūspavant*, *bālavant*, *hāstavant*, *himāvant*, all occur in post-Rik literature, and yet appear nowhere else than here in RV.? Clearly because the tenth book stands nearer than do the other books of RV. to that post-Rik literature. I have remarked above that several of the lone words of this sort in viii. are found also in later literature than RV. That this is true of x., the examples just given will show. In i. also *asthanvānt*, *śarādvant*, *datvānt*, etc. show that the same relation holds in less degree. On the other hand, the same sort of lone words in ix. and other family books than viii. show scarce a trace of Epic kinship, and in fact few of them appear again at all. Thus, if a scale be made in accordance with the facts stated in the last note, the books of the RV. will stand as follows:

ii. and vii.; iv.; iii., v., ix.; vi.; viii.; i.; x. But iii., iv., v., vi., and ix. have about the same proportion. In the first group: of the four examples in ii., *yusmāvat* and *goṣimat* are not cited from other literature; while *hārasvat* is possibly in AV.; and *mānasvant* is an epithet of Indra in Brāhmaṇas and Sūtras. Of the seven examples in vii., not a single one is cited from later literature (*agnimānt* occurs

* I have included in vi. the specimens found ib. 47. 24; and 48. 18; and in vii., those ib. 103. 3 and 104. 2. Were these (certainly late) examples omitted, the numbers would stand as follows: for x., 39; i., 24; viii., 19; vi., 9; iii., v., and ix., 8 each; iv., 6 or 7; vii., 5; ii., 4. In vii., moreover, *māhiṣvant*, at 68. 5, may be from *māhiṣvanta* which would put vii. and ii. on a level. I have not included as unique forms doublets that differ by a quantity or an accent only (e. g. *devāvat*, *ācvāvat*, *sāhāvat* = *sahāvat*). The form *dhrvasmanvānt*, which appears in PW. for one passage and in Grassmann for another, is really part of a phrase which recurs in several books. Some of the examples in iv. are in "new songs;" but this I have not considered. The doubtful form in iv. is *ṛkvant* (elsewhere *ṛkvan*).

instead of the late *agnivānt*). As for iii., iv., v., vi., ix., which may as well be considered together,—ix. has no form cited from later literature [the *vant*-forms in ix. are *drāvinasvant*, *pītryāvant*, *pīramādhivant*, *matāvant*, *matsarāvant*, *rōmanvant*, *vacandāvant*, *gubhrāvant*]; vi. shows none of the later forms save *tvāstīmānt*, which occurs in VS.; v. has no such later form at all; iv., among its six or seven words, has one, *āvimānt*, which occurs in AV., and one, *māyāvant*, which occurs in Brāh.; and finally, iii., out of its eight cases, has six *ἀπαξ λεγόμενα*, one case, *tokāvant*, cited again from Bhāg. P., and one, *rātnavānt*, cited again, in slightly different sense, from the Epic.*

The eighth book, therefore, in this regard, not only stands next to the tenth, but has more rapport with post-Vedic and Sanskrit vocabulary than have all the other family books put together; it has *dānavānt*, *nābhasvant*, *bāndhumānt*, perhaps *dhārmavānt*, not to speak of *añṣumānt*, *ōjasvant*, and *viśhumānt*, all, or nearly all, of which appear in post-Rik, if not in post-Vedic literature. There are, by far, more words of this class in viii., not repeated in the RV., than there are elsewhere in the RV.; and of these words, more show affinity with post-Rik literature. In fine, from whichever point of view it is studied, viii. here stands with x. rather than with ii.-vii.—does it not?†

parākāttāt, 81. 27. Most of the passages where these double ablatives occur are in x.; the two exact parallels, *adharāttāt*, *uttarāttāt*, occur only in x.; but *paçcāttāt* and *ārāttāt* are in vii.

* It will scarcely be necessary to give the long list of examples from x. and i. The others are as follows: ii. has *yusmāvant*, *çociśmant*, each *ἄπ. λεγ.*; *mānasvant*, *hārasvant*, also found in AV. (?) and Brāh., respectively; iii. has *kīvant*, *caṣṭlavānt*, *māhināvant*, *yajñāvant*, *yuvāvant*, *sūnumānt*, all *ἄπ. λεγ.*, and *tokāvant*, *rātnavānt*, Puranic and Epic, respectively; iv. has *āvimānt*, also in AV.; *açānimānt*, *indrasvant*, *prahāvant*, *hemyāvant*, all *ἄπ. λεγ.*, and *āvimānt*, AV., *māyāvant*, Brāh. (with *ḥkvaṭā* beside *ḥkvan*); v. has *añṣimānt*, *apīdhānavānt*, *abdimānt*, *udanimānt*, *jānivant*, *taviṣimānt*, *poṣyāvant*, *vipṣkvaṅt*, all in v. alone, and not cited from elsewhere (*jānivant* is repeated in v.); vi. has *tvāstīmānt* in VS., with all the rest *ἀπαξ λεγόμενα*, viz., *kṣāttavānt*, *dātravānt*, *dadhanvānt*, *prāṣṭimānt*, *nadanumānt*, *vayāvant*, *vṛcīvant*, *çipravānt*, *çuciśmant* (compare *çociśmant* in ii.), *hējasvant* (*dadhanvānt* and *prāṣṭimānt* in late hymns); vii. has *gātumānt*, *gopdāvant*, *pīṣadvānt*, *māhiṣvant* (or *māhiṣvanta*), *vivakvaṅt* (*agnivānt* and *ṛṣyāvant* in late hymns), all *ἀπαξ λεγόμενα*. For ix., see above.

† The lone indeclinable *vat*-forms present the same relation. There is (unrepeated) *manuvāt* in ii. 10. 6; *vasiṣṭhavāt* in vii. 96. 3 (with the repeated *jamadagnivāt*), withal in a hymn which lacks the family stamp. But in viii. alone there are *apnavānavāt* and *āurvabhṛgvāt*, 91. 4; *kaṇṇavāt*, 6. 11; Vāl. 4. 8; *nabhākavāt*, 40. 4, 5; *bhṛgvāt*, 48. 18; *mandhātṛvāt*, 40. 12; *sthārayūpavāt*, 28. 24. I think all other family forms are repeated in different books. The later poets have more new models. One other Kaṇva hymn has *virūpavāt* (i. 45. 8). Thrice in viii. and once in ix. appears *vyaçvavāt*. To the list above add *mitrāvāruṇavānt*, in viii. 85. 13 (*dhārmavānt*, ib.), making twenty examples instead of nineteen in viii. (but not a new passage).

- páridveṣas*, 64. 9. This, besides being ἀπαξ λεγόμενον, shows quite unique union of *pári* and *divṣ* (so *pári* + *pad* is found only in viii., x.). Compare below *vidveṣas* and *vidvéṣana*.
- parogavyūti*, 49. 20 (later in technical sense of *gavyūti*); and *parómātra*, 57. 6, ἀπαξ. All analogous forms (*paróksa*, *paró-
rajas*, *paróbāhú*, etc.) are later than RV.
- parjānyakrandya*, 91. 5. Compare vii. 103. 1, *parjānyajinvita*.
- pārçāna*, 7. 34; 45. 41; and in the late vii. 104. 5.
- pādaká*, 33. 19; unique till Smṛti as 'quarter.'
- pāvakāvāna*, 3. 3; VS. Compare *-varcas*, *-çocis* (formation early).
- pīngā*, 58. 9; parallel in Epic (PW.). In other meanings the word is Epic.
- pīyatná*, 2. 15. The verb *pīy* occurs 21. 14; i. 147. 2; x. 28. 11; 68. 6; AV.; Brāh. In i. 174. 8; ii. 19. 7 (only case in ii.-vii.), occurs *pīyá*.
- putraká*, 58. 8; Brāh.; Epic, etc. Compare *kumāraká*, above.
- purāhprasravāna*, see *prasravāna*, in List iv. (below).
- purāsthātār*, 46. 13; analogue of early *puróhita*, *puroyāvan*, *puroyodhá*; in i., x. occur *purogavá*, *purogā*.
- purúnāman*, 82. 17; AV. vi. 99. 1. Compare the ἀπαξ λεγόμενα *purutmán*, 2. 38; *púrutrá*,* 8. 22; *purunrmná*, 45. 21; *puru-
mandrá*, 5. 4; 8. 12; *puruvépas*, 44. 26; *purusamdhrtá*, 55. 4; 89. 6; and the nom. prop. *purumāyya*, 57. 10, and *puru-
hanman*, voc., 59. 2.†
- pūjana* in *çācipūjana*, 17. 12 (with *çācigu*, also ἀπαξ), both voc. Neither *pūj* nor *pūjana* occurs elsewhere in RV.
- pūrvapāyya*, 34. 5. Compare *pūrvāpús* (*āyús*? cf. Aufrecht, RV., p. V), only 22. 2 (*viçvapús*, only 26. 7); and *pūrvāpūti*, only in viii., i., x. (List iv., below).
- pṛdāku* (*sānu*), 17. 15; AV., etc.
- prānapāt*, 17. 13. Compare Smṛti *prapāutra*; classical *prati-
naptar* (*pra* as in AV. *prapitāmahá*, and *praçardha*, below).
- pratádvasu*, see List iii. (below).
- pratidhá*, 66. 4. Compare iv. 27. 5, *prāti dhat pibadhyāi*.
- prātiṣṭuti*, 13. 33; Brāh. Compare *pratiṣṭotar*, Sūtra (*prāti* + *stu* not elsewhere used?).
- prativī*, 23. 1; 26. 8; 39. 5. The verb is in early use.
- prabhaṅgá*, 46. 19, Epic, and *prabhaṅgin*, 50. 18, with *abhipra-
bhaṅgin*, 45. 35, the two last being ἀπαξ λεγόμενα, are unique nominal developments of *prá bhaṅj* (vi. 68. 6). The only parallels are cited from the Epic, *prabhaṅjana* (later, *pra-
bhaṅgura*).
- pramāda*, 2. 18 (AV. xx. 18. 3), cited only here till Epic, but with change of meaning in AV. *apramādam* (the verbal compound is early).

* Compare *çayutrá* in i. 117. 12. With the ascription of many names compare 11. 5 (here to Agni) and x. 54. 4.

† In viii., i., v., *purumīdhd*, nom. prop.

prayāyu, 19. 37; *prayā* in iii. 29. 15 (late).
pravāśā, 29. 8; *āproṣivāṅs*, 49. 19. The verb *prā-vas* occurs only in 29. 8 and iii. 7. 3 (late). Both verb and noun are common in Brūh. and Epic respectively.

praçardha (voc.), 4. 1. Comparing *çardha* and *çardhant* and the compound *atipraçardhāyat*, in 13. 6, it would seem that *pra* had here a sense common in post-Rik literature but rare in the Rik. In the Epic *pravega*, for instance, there is no forward movement; the word means simply 'very rapid.' So, too, Epic *prabala* is 'very strong.' This is also the meaning of *pravāra* in the Epic and in RV. x. 103. 5; possibly of *prāgravas*, v. 41. 16; probably of *ā-pramāra*, i. 90. 2; and of *praçardha* (to which PW. assigns the meaning *keck, trotzig*), for it is used exactly like *çardhastara* in i. 122. 10. This idea of 'very' is found in *prasakṣin*, which occurs only in 13. 10; 32. 27; Vāl. 1. 8; * in *prāçū*, 32. 16; iv. 25. 6; in *prāmahas*, v. 28. 4; vii. 66. 2; viii. 25. 3; and perhaps in one or two words more, though it is doubtful in other cases whether eminence, 'very,' or movement, 'forward,' is felt as the sense of *prā*. For this use without verb, compare 9. 19: *prā devayāntāḥ* (*açvinā*), "pre-eminent are the worshippers (of the Açvins)."

praçāśya, 11. 2; Epic and later (early is *praçāśnya*).

prasakṣin, see under *praçardha*.

prasthāvan, † voc., 20. 1; *prahetār* (*hētar* in viii.-ix.), 88. 7; *prahoṣin*, 81. 4 (compare *prahoṣā*, i. 150. 2); *prāçāmanyu*, 50. 9 (compare *prāçāñihva*, i. 140. 3). These are all *āraç*, though *prasthāvānt* occurs in VS., as does *prāheti*. I believe all prepositional compounds of *manyū* are late formations. In RV. in the family books, there are *ānuttamanyu*, vii. 31. 12; viii. 6. 35; 85. 19; *tuvimanyu*, voc., vii. 58. 2; *sāmānyu*, or *samanyū* (often); † but the prepositional compounds occur thus: *abhimanyu*, Epic; *upamanyū*, i. 102. 9; *nīmanyu*, AV.; *nirmānyu*, Epic; *parimanyū*, i. 39. 10; *pramānyu*, Epic; *vīmānyu*, i. 25. 4.

prāvargā, see List iii. (below).

plāyogī, 1. 33, *dānastuti*. Exactly as *prāçū* becomes *plāçu* in the Brāhm. period (may be dialectic), so *prāyogin* becomes *plāyogin* (or *prayoga* became *playoga*). *Prayōga* is itself late, first in x. 7. 5. Compare *pulu* for *puru* in i. 179. 5; x. 86. 22.

badā, 69. 1. See Note below, at end of article, p. 80.

* Compare *prasāh*, vi. 17. 4, etc. The *prāçū* here is 'very quick.' The other *prāçū*, meaning 'eating,' is found in i. 40. 1 and viii. 81. 6 (*prāçavyā*), unless the last be *āraç*, and i. 40. 1 goes with viii. 32. 16 (PW.). The form *prāçavyā* (81. 6), Epic *prāça*, has a parallel in v. 41. 20, *ūrjavyā* (PW.).

† Compare *samsthāvan* below.

‡ There is only one lone word of this origin in viii. besides *prāçā-manyu*, the adv. compound, viz. *manyuṣāvin*, 'in wickedness brewing.'

bāndhumant, 21. 4; Brāh.; Epic. Compare *gōbandhu*, above; *abandhū*, in viii., i., etc.; and the note on *paraçumānt*, above.
balbajastukā, Vāl. 7. 3; *balbaja* is late; *stūkā* is early; compare *stukāvīn*, 63. 13, ἀπ. λεγ.

bundā, 45. 4; 66. 6, 11.

bṛhādruktha, 32. 10. Compare *bṛbuka*, x. 27. 23. But the word is perhaps only for *bṛhādruktha*, as in v. 19. 3; x. 54. 6; 56. 7. Compare *bṛhātksayas*, below.

bṛhātksayas, 15. 9 (one word); later nom. prop.

bekanāta, 55. 10. This word for 'usurer' is paralleled only by *prāmaganda*, in the late verse iii. 53. 14. In a contract tablet of the reign of Nabonidos (555-538 B. C.) occurs *baqatum*, which "from the context here seems to be connected with money-lending" (Barton).

brahmanyā, 6. 33; cf. *subrahmanya*, post-Rik.

bhakti, 27. 11. A Brāh. word, here and in Brāh., 'giving'; later, 'faith.' Perhaps it should be translated like *bhaksā*.

bhadraḥkṛt, 14. 11; later, technically.

bhārabhṛt, 64. 12; *bhārman*, ἀπαξ, 2. 8; *vāja-bharman* (v. l.), ἀπαξ, 19. 30. Compare *bhārabhārīn*, TS.; *bhāribhāra*, RV. i. 164. 13. For *ariṣṭabharman*, 18. 4, see List v. (below).

bhiṣajy, 9. 6; 22. 10 (cf. *bhiṣaj*, 68. 2, and *bhiṣajy*, x. 131. 5, both ἀπαξ). The noun *bhiṣaj* occurs ii. 33. 4 and vi. 50. 7; else only in viii., i., ix., x., AV., Brāh., etc.; *bheṣajā* is both early and late. The interesting fact is that *bhiṣajy* is almost exclusively Brahmanic, and very common in Brāh. works, while in the RV. it is found only here.*

bhūrigu, see *āgu*, above.

bhetṭār, 17. 14; Brāh., Sūtra; common Epic word.

maksuṁgamā, 22. 16. Compare AV. *yudhirgamā*. The RV. form is (false analogy) imitative of *aramgamā* (PW.).

manā, 67. 2. Babylonian.

manmaçās, 15. 12. See Note at end of article, p. 75.

manyuṣāvin, 32. 21. See *prasthāvan*, above.

martyatvanā, 81. 13. See *janitvanā*, above.

mahāhastīn, 70. 1, of Indra. Compare *mahāhasta*, of Īiva, Mbhā.

mahenadi, and *mahemate*, vocatives, in 63. 15; 13. 11; 34. 7; Vāl. 1. 7.

mākt, 2. 42, *dānastuti*; *mākina*, 27. 8.†

mṛksā, see *kīja*, above, and *mṛakṣakṛtvan*, below.

* In AV., *bhiṣaj* and *bheṣajā* are common enough, but there is no verb of this stem. The AV. verb *niṣkar*, 'heal,' occurs in this sense in RV. at x. 97. 9, and, as *iṣkar*, in viii. 1. 12; 20. 26 (though the verb in other meanings recurs elsewhere). But AV. has already the Epic *cikitsati*.

† Perhaps *mākt* is as S. interprets it; but I suspect it is no more than a form of the possessive, standing to *mākina* as does *mākt* to *māhina*, a parallel to *asmāka*; compare the late Epic *svaka* (Pāli *saka*) for *sva*. In position, the possessive could stand after its noun, as does *māmaka*, in x. 103. 10. Compare *yakā*, below.

- mṛgay*, 2. 6; AV.; a common Epic verb (*mṛgayās*, ii. 38. 7, is referred to this stem).
- mṛakṣakṣīvan*, 50. 10. Compare *mṛkṣā*, 55. 3.
- yakā*, see *anyakā* in List ii. (below).
- yajās*, 40. 4; an old word?
- yajñahotar*, voc., 9. 17; in Smṛti as nom. prop.
- yavayā*, 67. 9. Compare *yāvamant* in List viii., below.
- yuvajāni*, 2. 19. The word *jāni* does not occur alone. Compare the compounds *dvijāni*, x. 101. 11; *vittājāni*, i. 112. 15; *sumājāni*, i. 156. 2; *ajāni*, *vijāni*, AV. In v. 61. 4, a late hymn, occurs *bhadrajānayas*, voc. No other case in ii.-vii.
- yuvādutta*, *yuvānīta*, 26. 12.
- vārenyakraṭu*, 43. 12; AV. vi. 23. 1 (*khila* to x. 9).
- rakṣastvā*, only in 18. 13. Of the 43 times that *rākṣas* itself occurs, eleven cases are in ii.-vii.; of the 31 times that *rakṣās* occurs, eight are in ii.-vii., with about the same proportion in the compounds. In viii. alone each word occurs about a third of the number of times it does in ii.-vii. combined.
- rajaṭā*, 25. 22, *dānastuti*. Perhaps 'silvery'?
- rāndhra*, 7. 26; an Epic word.
- rābhi* (*hiranyāyī*), 5. 29, with *rathacārṣaṇa* in 19, two parts of the car elsewhere unknown. Compare *hiranyapratiga* (i. 35. 5)?
- rambhā*, 45. 20 (classical in various other senses).
- rājakā*, 21. 18, *dānastuti*; common in Epic. See *virakā*, below.
- rādhaspati*, voc., 50. 14. See note to *ṛtaspati*, above.
- ruṣ*. Later than RV. *ruṣ* is a common verb; especially Epic, but also in AV. and Brāh. In RV. only in viii. 4. 8; 88. 4.
- vaktār*, see *adhivākā*, above.
- vayiyu*, see *svāstu*, below.
- vaçānna*, 43. 11. Compare *ukṣānna*, above.
- vāsurocis*, see *vasurūc*, in List vii. (below).
- vasudā*, 88. 4; AV.; Epic, *vasuda*. Compare *vasudāvan*, ii. 27. 12.
- vājadravināṣ*, 73. 6.
- vājabandhu*, see *gōbandhu*, above, under *godatra*.
- vātasvana*, 91. 5. Compare vii. 56. 3, *vātasvanas*.
- vāçā*, 19. 31. Compare *vāçrā*, used 16 times, and only once outside of i., viii.-x., viz. in the last verse of ii. 34. But PW. takes 'obedient' rather than 'roaring' as the meaning.
- vijōṣas*, 22. 10 (*saçōṣas* in early books).
- vidyūddhastā*, 7. 25; like *īṣuhastā*, x. 103. 2; but also like the old form *vājrahastā* (elaborated to *vājradakṣiṇa* in x.). The word may be regarded as an elaboration, like the last. Were it early, it would be repeated like *vājrahastā*, which occurs again and again.
- vidveṣas*, 22. 2; *vidvēṣaṇa*, 1. 2. The former is ἀν. λεγ.; the latter, as a noun, is Epic. The combination is late. The first occurrence of *vī dviṣ* is in AV. iii. 30. 4, where is found also, vs. 1, *āvidveṣa*, while *vidveṣā* occurs ib. v. 21. 1; and

- avidviṣ*, ib. i. 34. 5. Elsewhere *vi dviṣ* is eminently Epic and late. Except for these two instances in viii., RV. has no compound, verbal or nominal, of this sort.
- viprarājya*, 3. 4; cited again from classical literature; a significantly late word from its meaning, which is literal, 'in the sacrifices, the kingdom of the priests.'
- vibōdhana*, agentis, 3. 22; actionis, Epic; *vibodhā* (or *vibādhā*), x. 133. 4; *vi budh* in causal, only i. 12. 4; 22. 1; Epic, etc.; simple *vi budh*, first in Epic (?).
- vibhumant*, 85. 16; perhaps as later (Brāh.), 'with *vibhus*.' In any case a late word.
- vibhūtarāti*, see List iii. (below).
- vimahā*, 6. 44. Compare Epic *vimahant*. PW. compares *vimahas*, which is found in i. 86. 1, and in the late passage, v. 87. 4.
- vivāksana*, 1. 25; 21. 5; 35. 23; 45. 11; Vāl. 1. 4.
- viṣvātodhī*, see *viṣvāmanas*, List ii. (below).
- viṣvāmanas*, see List ii.; *viṣvāmānuṣa*, 45. 42; compare *saptā-mānuṣa*, below, and *viṣvajana*, Brāh.
- viṣvāvārya*, 19. 11; 22. 12 (early is *viṣvāvāra*). The word *vārya* is early.
- vīrakā*, 80. 2; Epic. Compare *kumārakā*, *pādakā*, *putrakā*, *rājakā*, all for the first time in viii. Perhaps *vṛdhikā*, 67. 4, belongs here.
- vṛṣatvanā*, see *janitvanā*, above. Other unique forms of this sort in viii. are *vṛṣanābhi*, 20. 10; *vṛṣapatnī*, 15. 6; *vṛṣadanji* and *vṛṣaprayāvan*, 20. 9; *vṛṣapsu*, 20. 7, 10;—that is, chiefly in one hymn.
- venū*, Vāl. 7. 3; AV., etc.; Epic.
- vēda*, in late sense of wisdom, only in 19. 5; AV., Brāh., etc. In RV., *suvēda* is from *vid*, 'find'; *vidyā*, only in x. 71. 11.
- vēdiṣṭha*, 2. 24. Compare *vēdiyaṁs* in vii. 98. 1, perhaps late, as the Vasiṣṭha tag appears to be copied. The positive form, *vēditar*, occurs first in AV.
- vāiṣvānarā*, in the sense 'complete,' 30. 4. This meaning is found in AV. and Brāh. In RV., only here; elsewhere *vāiṣvānarā* is applied to Agni in RV., except in ix. 61. 16, where it is epithet of light. In 30. 4, *viṣve* (*devās*) *vāiṣvānarā utā*, the word can have only its later sense.
- vyāñjana*, 67. 2, with *abhyāñjana*, which see in List ii. (below). Both words are late (compare in PW. the use of *vyāñjana* as 'insignia'); but the verbal compound is early.
- vratāti*, 40. 6; Brāh., etc.
- vratyā*, 48. 8. Like *avratyā*, a Brāh. word, but there *vratya*.
- catābradhna*, 66. 7. Considering the number of *cata* compounds strewn through the whole work, those that are here mentioned do not appear to be particularly significant. But it may be of interest to note that some of these are confined to viii. and its group. Thus besides *catābradhna*, there is *catāparvan* (AV., Epic), at i. 80. 6; viii. 6. 6; 65. 2; 78. 3; *catāvanti*, viii. 5. 15; 24. 29; 53. 5; x. 94. 2; 102. 5, 9, and the late hymn (see

- Lanman), vi. 47. 9; *catāvāja*, viii. 81. 10; ix. 96. 9; 110. 10; *catāmagha*, viii. 1. 5; 33. 5; 34. 7; ix. 62. 14; *catācva*, viii. 4. 19; x. 62. 8 (and Sūtras).*
- catrutvā*, 45. 5. A late word? (Sprüche.)
- catrasāh*, 49. 6, and AV.
- cānāis*, 45. 11; 80. 3 (with *canakāis*); common word in Brāh., Epic.
- canakāis*, 80. 3; a Smṛti word, peculiarly Epic, and in (late) Upanishads.
- capḥā*, 47. 17. This word for $\frac{1}{2}$ is united with *kalā*, $\frac{1}{2}$. Compare the same, AV. vi. 46. 3; xix. 57. 1; but (not in technical sense) *prakalavā*, RV. vii. 18. 15. Both *capḥā* and *kalā* as fractions are Brahmanic (Smṛti).
- carabhā*, 83. 6, nom. prop. To judge by the metre, the verse is late. As a common noun, *carabhā* is found in AV. and later.
- cavasī*, 45. 5; 66. 2, Indra's mother. Compare *cāvasaḥ sūnūḥ*, of Indra, iv. 24. 1; viii. 79. 2.
- cākinā*, 33. 6 (*cākin*, early). Like late *rathina* (*vanina*) compared with early *rathin* (*vanin*).† Imitation of vi. 45. 22?
- cācigu*, *cācipūjana*, in voc., 17. 12; see *pūj* above; and *ākhaṇḍala* (in same hymn).
- cāstrā*, 33. 16; a Smṛti word. Compare *praçāstrā*, ii. 36. 6 (late); ii. 1. 2 (i. 94. 6; ii. 5. 4, *praçāstār*); x. 91. 10.
- cubhrahādī*, see *karnacābhana*, above.
- cēvāra*, 1. 22. With the idea, if certain,‡ compare x. 73. 4, *vasāvi*, late; *çevadhī*, ii. 13. 6 (mystic; late?). The last word occurs in AV., Brāh. etc. Compare also *çevadhipā*, Vāl. 3. 9.
- crāuṣṭī*, 48. 2. Compare *yudhāmcrāuṣṭī*, nom. prop., Brāh.
- crāvaskāma*, 2. 38; *cravojit*, 32. 14.
- crāvayātsakhi*, 46. 12. Compare *crāvayātpati*, v. 25. 5; *drāvayātsakha*, x. 39. 10; *yāvayātsakha*, x. 26. 5; *mandayātsakha*, i. 4. 7 (*mandādāvira*, āp. lex., viii. 58. 1).
- crēsthacocis*, see *ajirā*, List vii., below.
- crasātha*, 85. 7; Brāh.
- crātrabhūj*, see *crātrā*, List iv., below; *crūtina*, see List iii., below.
- crvetayāvarī* (river), 26. 18; compare *crvetyā*, x. 75. 6. This is the only *crveta* compound in RV. They abound in later literature, several being in Brāh. The *yāvan* compounds are found late and early. Compare *cubhrayāvan*, viii. 26. 19. It is perhaps worthy of note that *cubhramyāvan* also is virtually in the later group, as v. 61. 13 is late (elsewhere, i. 89. 7). Unique (in viii.) are *akṣṇayāvan*, *svayāvan*, *rathayāvan*.

* *Çatāpatra* and *çatārcas* are found only in the RV. at vii. 97. 7 and 100. 3, respectively (the former again in the Epic). In Vāl. 1. 2; 2. 2, *çatānika*, later nom. prop.

† The form *rathina* is late Sk.; *vanin* appears in early books of RV.; *vanina* only in RV. x. 66. 9.

‡ The meaning is doubtful. One is tempted to connect with *çevāla*. But the idea generally assigned is common enough, as in x. 47. 2.

- (sa- or) *saṁsthāvan*, 37. 4; see *prasthāvan*, above. Both forms, ἀπαξ *ley*.
saṁvādā, 90. 4; a Brāhmaṇa and Smṛti word. Compare *vāda*, Smṛti.
 [*saṁvād*, Vāl. 10. 1; AV.; Brāh. The hymn is perhaps interpolated.]
satōmahant, 30. 1. There is a parallel to this in the late hymn to the weapons, vi. 75. 9, *satōvira*; and a better in the Brahmanic *satōbrhant*.
sadyojā, 70. 9. Compare *vasūjā*, 88. 8; *ādityājūta*, 46. 5; all ἀπ. *ley*.
sadhāstrutya, 26. 1; for *sadhāstruti*.
sārdhātā, 1. 12; Epic.
saṁdhi, 1. 12; AV.; Brāh.
sāpiti, 1. 23; TS.
saptāpada, 61. 16; AV., etc.
saptābuddha, 40. 5.
saptāmānuṣa, 39. 8. Compare *viṣvāmānuṣa*, above, and, in 81. 20, *saptā saṁsādaḥ*, with 2. 33; must mean seven (many) people.
sāptā, Vāl. 7. 5; 11. 5 (*tribhiḥ sāptēbhīḥ*).
sābala, 82. 9; AV.; Epic.
samudrāvāsa, 91. 4-6; compare Epic *samudrāvāsin* (sea-dwellers).
sārāti, 27. 14, 17; Brāh.
sahasranirmij, 8. 11, 14, 15; *sahasraparna*, 66. 7, and AV.; *sahasrapoṣin*, * 92. 4; *sahasrabāhu*, 45. 26, Epic. Compare in viii.-ix., *sahasroti*; in viii.-x., *sahasrapad*. In viii. 34. 15 alone occurs the form *sahasraçās*, quite common after RV. See Note, below at end of article, p. 75.
siṣṇu, voc., 19. 31; an old form?
suātī, 47. 1; an old word?
sukāra, 69. 6. This (like the Epic *duṣkara*) is a Smṛti word, for it means 'easy to do,' whereas *su* in RV. with *kr* is usually moral, rarely physical. In 13. 7; 46. 27, this moral side is apparent in *sukṛtvān* (the word is found only here). Compare *suddtu*, 67. 8, meaning 'leicht theilbar' (PW.). Compare also the many occurrences of *sukṛt*, *sukṛtā*, *sukṛtyā*, etc., always with the idea of 'good.'† The word *sukāra* is found only here in RV., but is common in the Epic. With *sukṛta* in 66. 11 is joined the ἀπ. *ley*, *sūmāya*, 'well made.'
sugevādh, 18. 2; *sujāmbha*, 49. 13; *sutārman*, 42. 3; *sutīrthā*, see *tīrthā*, List vi. (below); *sutyāj*, 49. 16.
suddakṣiṇa, 33. 5 (with *suṣavyā*, ἀπαξ); and in vii. 32. 3, the one late verse of the hymn! The word is Epic, 'dextrous,' not 'generous.'
suddtu, 67. 8; with *suṣā*, ib. 4.
supratāt, 23. 29; see *prātūrti*, List iii., below.

* But *sahasrapoṣā*, -*poṣyā* are early.

† The physical side appears only in *sukārman*, iv. 2. 17; 83. 9.

- supśaras*, 26. 24; *subhās*, 23. 20; *sūyukta*, 58. 13; *suṇḍastu*, 19. 37: *utā me prayiyor vayiyoh suṇḍastvā ādhi tāgvani* (five *ἄπαξ λεγόμενα*), Niruk., p. 43; *sūvidvāns*, 24. 23; *suśāman*, 49. 18 (23. 28, etc., *suśāman*, nom. prop.); *suśāda*, Vāl. 10. 3; *suśirā*, 58. 12 (Brāh., Epic); *suśarāṇā*, 27. 18; Epic ('escape,' either 'from' or 'to'); *suhārā*, 2. 5 (may mean Epic *suhṛd*, *sūhārā*, as it does in AV., and be the opposite of *durhārā*, AV.; compare vss. 21, 27).*
- śūdadohas*, 58. 3. On *śūda* see Pischel, VS., i, p. 72.
- srprākurasna*, 32. 10, of Indra. After iii. 18. 5 (*srprā-karāsnā dudhise vāpīṇsi*)?
- stukāvīn*, 63. 13; see *balbajastukā*, above.
- stomavārdhana*, see *ukthavārdhana*, above.
- sphirā*, 1. 23; an old word?
- srāma*, 48. 5; Brāh.
- hariṣṛt*, 15. 4; Vāl. 2. 10.
- haskṛti*, 78. 6. See *upahāsavan* above, and final Note, p. 78.
- hinṇā*, 40. 9; compare *asunvā*, above.
- hīranyakeśya*, see List iii., below, and compare the *ἄπ. λεγ. χρῆτάκης*, 49. 2.
- hīranyapeśa*, 8. 2; 31. 8. For *zuranyopaśa*, see Note, p. 84.
- hīranyābhīṣu*, 5. 28; 22. 5. Compare the *ἄπ. λεγ. σβαλῆς*, 57. 16, 18.
- hōman*, 'call,' 52. 4.

By way of convenient survey, I give in this paragraph the following late words (mostly Brahmanic and Epic) culled from the foregoing list, which words, were we to assume that viii. is the oldest book, would be particularly inexplicable.† The words are: *adhvagā*, *ānatidbhuta*, *ānābhayin*, *apācyā*, *abhrātṛvyā*, *āmbara*, *avabhṛthā*, *avāryā*, *apāsyā*, *āpnāis*, *ākhaṇḍala*, *āyāna*, *udayā*, *upahāsran*, *ṛtaspati*, *ekarāj* (AV.), *edhatā* (AV.), *odanā* (AV.), *karnaśobhana*, *kalā*, *kumārakā*, *kūḍ*, *kūla*, *tadīdartha*, *dātra*, *dānavant*, *Dvītā*, *Dhārma(vant)*, *parogavyūti*, *pādakā*, *pīṇḡā*, *putrakā*, (*śāci*-)*pūjana*, *prabhaṅgā*, (-in, *abhi*-), *bāndhumant*, *bhiṣajy*, *mahāhastin*, *rāndhra*, *vidvēsana*, *viprarājya*, *vibōdhana*, *virakā*, *vēda*, *vāigvānarā* ('complete,' AV.), *vyāñjana*, *ṣatrutvā*, *śānāis*, *śanakāis*, *ṣaphā* (fraction), *Ḍavast*, *ḡstrā*, *sāmāhātar*, *sukāra*, *srāma*. But the others, in the affinities of their forms and the location of parallel words, will also repay a careful consideration.

In addition to these, there are the following forms which, unless I err, and except for proper names, include nearly all the words used in RV. only in viii. Some are merely old forms with negative prefix. Some seem to me to indicate neither antiquity nor

* Usually rendered 'having a good *hārā* or stomach.' But the poet perhaps means that bad preparations do not frighten a friendly guest.

† None of these occurs in a *dānastuti*. The only important *dānastuti* words in the list above are *kuhayā*, *naḍā*, *plāyogi*, *yakā*, *rajatā*, *rājakā*.

recent growth, but to be such compounds as might be old and remain unimitated or be quite new. They are forms for which I find no analogies either in later or early literature.* It is, however, only fair to give the list, that the reader may not think the proportion of apparently late words to be greater than it is. The forms are: *āgorudha*, *ajāra*, *ātirna*, *ādurmakha*, *ānapasphur*, *ānarṣurāti*, *ānūrmī*, *apasphār*, *apākr̥ti*, *āpānrti*, *apratimānā*, *aprāmīsatya*, *ābadhīra*, *abhyādrām*, *āmāthīta*, *arājān*, *āgvesita*, *asacadvis*, *āstr̥tayaśvan*, *āghr̥nivasu*, *āmūri*, *ācūlēsas*, *indrayopā*, *upavīd*, *upārāna* ('*uperaya*,' 32. 21), *urāmāthi*, *urīyuga*, *urusyū*, *urjāduti* (VS.), *rtīvasu*, *rbhuṣṭhīra*, [*chāndya*], *jmāyānt*, *tradī*, *tripastya*, *tryāruṣa*, *divāvasu*, *dravāccakra*, (*agni*) *dāvodāsa*, *nādanū*, *nicumpunū*, *nīdhārāyā*, *parivij*, *parihvīt*, *pr̥thupāksas*, *bhāryāsuti*, *māderaghai*, *manotār*, † *māhīśvāni*, *mitāmedha* (Vāl. 5. 5), *m̐c*, *yonyū*, *rājesita*, *rathāsāh*, *rathayāvan*, *rapsād*, *nak-ṣāni*, *vār̥siṣṭhakṣatra*, *vīpravacas*, *vibhānu*, *vibhukrātu*, *vīpdyu-vepas*, *viśudrūheva* (26. 15, doubtful), *vītīvāra*, *v̐ṣṭhak* (*p̐ṣṭhak*? 43. 4), *śirāpocis*, *gukrapūtapa*, *gūnesita*, *glokīn*, *sāptya*, *surācū*, *snēhiti* (or *sn̐hiti*, 85. 13), † *smāt̐purañdhi*, *smādrātīṣāc*, *svā-dhāinava*, *svanādratha*, *svab̐dīn*, *svayāvan*, *svaṣvayū*, *hīranyavī*, *hīdās* (doubtful, 18. 19).

There may be in this list, and in the forms I have marked above as of questionable antiquity, enough that is archaic to offset the verbal kinship with post-Rik language evinced by the long list of late words in the eighth book: but I confess that I am unable to see any comparison in the bearings of the two sets of words. In the one case there are a few words which may be old. In the other there are a large number of words, any one of which might indeed by chance have escaped repetition; but their sum is momentous and indicative of a close relationship between viii. and the later language.

But, besides these, there are numerous words of viii. which occur in other books as well, but in those books which form in my opinion a sort of group with the eighth, viz., in the tenth and first, and in less degree in the ninth. These words make a no less important criterion of criticism. But, whereas, in the words peculiar to viii., the chief interest lies in the determination of their archaic value, there is interest in these new lists, not only in the age of each word but in the scope of parallelism between viii. and the books which stand apart from the family books; so that even negatives, if used only here, become instructive as showing a similar thesaurus.

* Some of the forms given above might have been included here; but I wished on the one hand to include there all forms that might be thought antique, and on the other to group forms of like sort, unless as in *svaṣvayū* some one form seemed too late to be put with others of its group. A few more are given in the Lists below.

† In viii. 8. 12; i. 46. 2. The difference is only the accent of *manotār* in early books.

‡ See List v., below.

"But," some one may object, "any book has late words." So indeed it has. And, accordingly, before proceeding to the study of these parallelisms, I consider this more closely. Every *mandala* has its store of words that do not occur again till a later period, and the question may naturally arise whether the words enlisted above do not give a false impression; and whether late words collected from one of the other family books would not give the same result. Anticipating this objection, I have collected all the corresponding words in the seventh *mandala*, which is next in size to the eighth, and is generally recognized as one of the oldest family collections. I find that the list of 'Epic' or of 'Brahmanic' words is such as might have been presupposed in accordance with the general theory of this essay. The conditions are not quite the same, for in vii. there are four hymns (33, 50, 103, 104) later than any in viii., and the group beginning with 15 is out of place and later than the first collection. Moreover such hymns as 4, 8, 18, 81, 83, which lack or copy the Vasiṣṭha stamp (or appended formula), are also in all probability later than the marked Vasiṣṭha hymns.

The 'Epic' or Sanskrit words, apart from these later hymns, are: 1. 19, *dūrvāśas*, in the Epic an epithet of Īva; 3. 2, *vrājana*, in the Epic a proper name (Sk. 'wandering,' Veda 'path'); 56. 3, *vātasnanas*, 'noise of wind,' but in Purāṇa, name of mountain; 64. 2, *sindhu-pati*, 'lord of S,' but in the Epic, 'lord of Sindhu people'; 66. 10, *pāribhātī*, 'power,' late Sk. 'harm'; 88. 6, *yakṣin*, 'alive' or 'holy,' but in the Epic, *yakṣiṇī*, 'a female devil';* 97. 7, *ṣatāpatra* (literal), in the Epic, of various unrelated meanings. It will be seen that the compounds are few and such as might easily be remade, while the uncompounded words are still rarer. The later group, of non-Vasiṣṭha and late hymns, adds the late words, 4. 8, *anyōdarya*; 8. 2, *sūmahant*; 15. 3, *amātya*; 18. 20, *dēvaka* (in 10, *yathākṛtīm* is a Sūtra phrase); 34. 14, *havyād* (Epic *havyāda*); ib. 19, *mahāsena*;† 81. 4, *ratnabhāj*, 'giving gifts,' against Epic 'having jewels'; 83. 2, *kṛtādhvaj*, late Sk. *kṛtādhvaja*, proper name; 94. 12, *ābhogā*, Epic similar meaning;‡ 103. 2, *sarast* and *vatsin* (Frog Hymn);§ 104. 10, *steyakṛt*; ib. 17, *khargālā*. Nor is much gained by adding the 'Brahmanic' words, 20. 6, *bhres*; 50. 1, 4, 2 (late hymn), *ajakāvā*, *anudakā*, *kulphā*; 66. 11, *anāpyā*; 85. 2, *devahūya*.

The plainly late and apparently late hymns of vii. contain naturally the most characteristically late words. But from the

* This and the preceding hymn (87. 5; 88. 3) contain *preṣkhā*. Both appear to be late hymns. On *didṛkṣu*, in 86. 8, see Gaedike, Acc., p. 189 (perhaps locative).

† This is probably not a Vasiṣṭha hymn, as 22 ff. is a later addition.

‡ In RV. a snake, in Epic the hood of the snake, and in other meanings. This is not a Vasiṣṭha hymn apparently.

§ This hymn has further the late words *vratacārīn* (Sūtra and Epic); *prāvṛṣ*, AV.; *dvādaçā* in Brahmanic sense; *çāktā*, *gómāyu*, *atirātrā* (technical, AV., Brāh.), *parivatsarīṇa*, AV.

comparison of vii. and viii. comes the important fact that *all the hymns of vii. put together contain less than half as many late words as does viii.*, including withal the very latest hymns of the former collection. The late words in viii. are so strewn through the collection that there is little use in attempting to mark off late and early hymns except very generally, for the difference in age between them is not by any means so marked as in the case of the seventh *maṇḍala*. There are of course some hymns (such as 17, 33, 45, 47, 58, 67, 80) which are verbally later than others. But on the whole the difference is small.*

These objections considered, I now proceed to take up first the verbal parallels between viii. and x.; then those between viii. and i.; then those between viii., i., and x. After these come the cases of similarity between viii., i., and ix., which are less important; then those between viii., i., ix., and x.; and, finally, those between viii. and ix., and between viii., ix. and x.

List ii.: Words occurring in RV. viii. and x., but not elsewhere in RV.

adhaspadā, viii. 5. 38; x. 133. 4; 134. 2; 166. 5; and half a dozen times in AV.

ādhyakṣa, viii. 43. 24; thrice in x. (88. 13; 128. 1; 129. 7) and thrice in AV.; later, a common word.

ānāpi, viii. 21. 13; x. 39. 6 (*āpi* is early; but *āpitvá* is only in viii.).

anulbanā, viii. 25. 9; x. 53. 6; Brāh. (*úlba*, only in x. 51. 1; AV.; Brāh.; *ulbanā*, Brāh.).

anyakā, viii. 21. 18; 39. 1;† x. 133. 1.

abhyārjāna, viii. 3. 24; 67. 2; x. 85. 7; twice in AV. Both cases in viii. are late apparently, so that it is questionable whether PW. does well to render 'adornment' in distinction from 'ointment,' the later meaning. The limited verbal use may indicate the latter as well as the former. In ix. 86. 43 *abhy ārjate* means 'anoint,' and so, in my opinion, does the same verb in ii. 8. 4: '(he shines) with his flames when he is anointed' (as in x. 87. 20, *ajāra* is here a noun).

āyuddha, viii. 45. 3; x. 27. 10 (*ayudhyā*, x. 103. 7; *āyuddhasena*, x. 138. 5); all used of Indra or his weapons. Compare also *āyudhvin*, x. 108. 5, and *ayoddhār*,† i. 32. 6 (but not a Kāṇva hymn); *ayodhyā*, AV.

* The group which seems to contain the oldest hymns, judged from this point of view, is that immediately following the Vāṅkhyā (from 49 to 66, with the exception of 58), a fact which, taken in connection with the late character of the first hymns in viii., may tend to show that the Vāl. was prefixed to the original beginning; prior to the addition of the hymns that now precede the Vāṅkhyā.

† And in the following hymns in the same refrain. Apparently a late formation, analogous to *ēka*, etc.; comparable with *yakā*, viii. 21. 18 (unique in RV.). Compare *vīcva*, only in viii., i., x.; *takā*, only in i.; and *amuka*, *asakā*, post-Rik.

‡ Not 'schlechter Kampf'; rather 'not finding any one to fight him,' or 'unmatched' (Whitney, AJP. xiii. 300).

- av*, in causal as 'devour,' only viii. 45. 38; x. 113. 8; but in AV. and Brāh.
- ahāpūva*, a demon, viii. 32. 2, 26; 66. 2; x. 144. 3. Compare ix. 77. 3, etc., *ahī*.
- ādardirā*, viii. 89. 4; x. 78. 6.
- ubhayāvān*, viii. 1. 2; x. 87. 3; once in AV.*
- ūrā*, viii. 34. 3; x. 95. 3, a late hymn.
- ūrā*, viii. 1. 34; 59. 10; x. 85. 37; 90. 11, 12; 162. 4; 163. 4; common in AV.; Brāh., etc. In 59. 10 occurs the only instance where *ṛtāyā*, which occurs ten times, becomes *ṛtāyā*.
- ṛ'cya*, viii. 4. 10; *ṛcyadā*, x. 39. 8; *ṛ'cya* occurs only here and in AV., Brāh., etc.
- ṛśivas*, voc., viii. 2. 28; *ṛśivāt*, x. 66. 14; Smṛti.
- etādṛ'p*, viii. 91. 19; x. 27. 24 (late verse); Brāh., etc. Compare *upadṛ'p* in List vii. (below).
- kavitvanā*, viii. 40. 3; *kavitvā*, x. 124. 7. The form in viii. is unique; that in x. ('song-art') occurs in Smṛti. See *janitvanā* in List i., above.
- kṛpay*, viii. 46. 16; x. 98. 7; the nearest approach to Epic *kṛpāy*. So *kṛpany* occurs only viii. 39. 4 (x. 74. 3), from *kṛpāna*, which occurs first in x. 99. 9. The older verb is *kṛap*.
- khédā*, viii. 61. 8; 66. 3; x. 116. 4; quasi personification of Indra's weapon, the Destroyer. In 61. 8 it is called *trivṛt*, an epithet which occurs only in viii., i., ix., x. Compare AV. xix. 27. 3, for the frequent later use.
- godhā*, viii. 58. 9; x. 28. 10-11; AV. and later, in more special meanings. In RV. 'bow-string' (not 'harp-string') in each case. Compare in viii. *gārgara* and *pīngā*. In the song at viii. 58. 9, the words mean, 'sound the harp and twang the bow-string!'
- gōṣāti*, viii. 73. 7; x. 38. 1. Compare *dhānasāti* in x., *ghanasā* in ii.; but in other cases the formation with *sāti* is common in early books.
- cikit*, viii. 86. 14; 91. 2; Vāl. 3. 3; x. 3. 1; *cikitā*, Vāl. 8. 5; AV.; *cikitvān*, only viii. 49. 18; *cikitvīnmanas*, viii. 84. 5; v. 22. 3.
- citrārādhas*, viii. 11. 9; x. 65. 3; AV. Compare *citrāvāja*, only viii. 7. 38.
- janitvanā*, see List i. (above).
- jālpi*, viii. 48. 14; x. 82. 7; noun in AV., verb in Brāh.
- turvāne* (sic), viii. 9. 13; 12. 19; 45. 27; x. 93. 10. There is one other case, vi. 46. 8, notoriously late.
- dabhrācetas*, viii. 90. 16; x. 61. 8.
- dirghāyutvā*, Vāl. 11. 7; x. 62. 2; AV., etc.
- duvasyā*, viii. 91. 2; x. 100. 12 (late verse?); early is *duvoṣyā*.
- dravitnā*, viii. 63. 14; 81. 15; x. 11. 9; 49. 9. Compare *drāvayitnā*, ix. 69. 6; *tanayitnā*, iv. 3. 1; x. 66. 11; *poṣayitnā*, iii. 4. 9 (Āpṛī); iv. 57. 1 (this is a late hymn); *stanayitnā*, v. 83. 6. Compare also *mādayitnā*, ix. 101. 1; *sūdayitnā*,

* That is, once besides the parallel to RV.

- x. 64. 9; *anāmayitnā*, x. 137. 7. The forms seem to be late with the exception of (*s*)*tanayitnā*. There is, I believe, no exact parallel to *dravitnā*.
- dhār úttarā*, viii. 33. 18; x. 28. 6.
- nābhantām*, viii. 39-42; x. 133. 1; in different form, the verb occurs in AV., Brāh. The noun *nābh* occurs only in i. 174. 8. The name *nābhākā* occurs only in viii. But *nabhanā*, -*nā*, etc. are early parallels.
- nārṛtis*, in plural, viii. 24. 24; x. 114. 2 (a late hymn). In other family books, only in singular.
- nédīyas*, as adv., viii. 64. 5; Vāl. 5. 5; x. 101. 3. The adj. occurs in viii. 26. 10; x. 86. 20.
- nyāk*, as adv., viii. 4. 1; 28. 3; 32. 25; 54. 1; x. 60. 11; 94. 5; 100. 8. This use appears in Brāh., Epic, etc.
- paripád*, viii. 24. 24; x. 28. 10. Compare *páridveśas* in viii. 64. 9. Unique verbal use with *pári*. Compare also of similar meaning, *paripanthín*, only in i., x.
- pākatrá*, viii. 18. 15; x. 2. 5. Compare *pākavánt*, x. 100. 3; unique; *pākaśāśá*, vii. 104. 9, late hymn; *pākasítvan*, x. 86. 19; *pākasthāman*, nom. prop., viii. 3. 21, 22. Early are *pāka* and *pākyā*.
- purānavát*, viii. 40. 6; 62. 11; x. 43. 9. In the family books occur *pūrváthā*, *pūrvavát*, *pratnāthā*, *pratnavát*, but not *purānavát*, which, however, is not cited from later works.
- prabūdḥ*, viii. 27. 19; x. 128. 6; former, noun; latter, adj. The verb, *prá budh*, is used once in viii. 9. 16, and in causal, ib. 17; i. 113. 14; 124. 10; 134. 3; iv. 14. 3; 51. 5; x. 42. 2. Of these iv. 14 is apparently an imitation of iv. 13. Both *prabudha* and *prabodha* are late (*Smṛti*) forms.
- bhujā*, viii. 8. 2; 91. 6; x. 106. 4.
- bhrātṛtvá*, viii. 20. 22; 72. 8; x. 108. 10; Epic, etc.
- manasy*, viii. 45. 31; x. 27. 5; AV.; Brāh., etc. (*manasyú*, only x. 171. 3).
- mahāmahá*: *ahám asmi mahāmaháh* says Indra, x. 119. 12. Nowhere else except in viii. 24. 10; 33. 15; 46. 10. Analogous forms are all late: *ghanāghaná*, x.; *carācará*, x.; *calācalá*, i. 164. 48; *sarīsrpá*, x.; *vadāvadá*, Āit. Brāh. Compare *yavīyúdh*, only viii. 4. 6; x. 61. 9.
- māni*, viii. 17. 14; x. 136. 2 ff.; AV.; Brāh. In these RV. passages *māni* has its late technical sense of a mad devotee. In vii. 56. 8 the same word has an older sense: "Es ist nicht möglich hier mit Sāy. die Bedeutung *Asket* festzuhalten" (PW.).
- mṛtyubāndhu*, viii. 18. 22; x. 95. 18 (late hymn). The *mṛtyú* compounds are very common after RV. This is the only one in RV. For *bāndhu* compounds, see under *ṛṣibāndhu*, above in List i.
- yavīyúdh*, viii. 4. 6; x. 61. 9. See under *mahāmahá*, above.
- valgú* (*vādāte*) as dulce, late idiom, found in RV. only in viii. 62. 8; x. 62. 4 (*vadati*).

vīmanas, viii. 75. 2; x. 82. 2. A common Epic word, nor is the Epic meaning impossible in viii. The abstract *vāimanasyā*, which also is Epic, occurs first AV. v. 21. 1. The verb *vī man* occurs only x. 92. 3.

viṣvākarma(n), viii. 87. 2; x. 81. 2-7; 82. 2; 166. 4; 170. 4; AV.; Brāh.

viṣvāmanas, nom. prop., viii. 23. 2; 24. 7; adj., x. 55. 8. Compare *viṣvāmanas*, ἀπ. λεγ., viii. 46. 17 (see 45. 42); and in viii. 34. 6, *viṣvātodhī*, ἀπ. λεγ.

viṣvād, viii. 44. 26; x. 16. 6; twice in AV.; also in Brāh.

viśa, 'servant,' viii. 19. 11; x. 109. 5.

gatāvant and *gatāva*, see under *gatābradhna*, List i. (above).

gīnjāra, nom. prop., viii. 5. 25; x. 40. 7. The verb *gīnj* occurs only i. 164. 29; vi. 75. 3 (both late).

sāmvānana, viii. 1. 2; x. 93. 12; three times in AV.; also in Epic.

sāmvārgam, viii. 64. 12; x. 43. 5 (both with *jī*); the adj. is Brāh. [*sabhd*, as 'assembly hall,' viii. 4. 9; x. (34. 6); 71. 10. In i. 167.

3; iv. 2. 5, the word appears to be used in an older sense. The late meaning here ascribed rather doubtfully to *sabhd* may be maintained for vi. 28. 6; but it is to be remarked that this hymn, which holds cows to be more sacred than gods, appears to be late. The word is sometimes translated by 'houses' (so by Müller, SBE. xxxii. p. 276). This certainly must be the sense in iv. 2. 5, where at any rate 'assembly-hall' will not do. But I bracket the word as a doubtful though probable case.]

sahāsravāja, viii. 81. 10; x. 104. 7; possibly accidental.

sāraghā, viii. 4. 8; x. 106. 10; twice in AV.

sābhadra, viii. 1. 34; x. 10. 14; Epic. The example in viii. is in a late added verse.

suśōma, viii. 7. 29; 53. 11; x. 75. 5.

suṣṭhā, viii. 22. 18; x. 107. 11 (*suṣṭhuvāh*), a late word.

sūryāmdsā, viii. 83. 2; x. 64. 3; 68. 10; 92. 12; 93. 5.

sōtu, viii. 19. 18; x. 76. 6; 86. 1.

sōmaprsthā, viii. 43. 11; 52. 2; x. 91. 14 (with *vedhāse*, as in viii. 43. 11); thrice in AV.

svāsetu, viii. 39. 10; x. 61. 16.

hānta, viii. 69. 5; x. 53. 2; 119. 9; once in AV.; Brāh.; Epic, etc.

hitāprayas, viii. 27. 7; 49. 17; 58. 18 (late verse); x. 61. 15 (late hymn); 112. 7. Except for the last case, always in the phrase, *vṛktābarhiṣo hitāprayasaḥ*. Compare ii. 37. 4; vi. 15. 15; viii. 32. 29; 82. 24. The phrase-form is new.

Observe that by far the greater number of these cases affect those hymns of viii. that precede the Vālakhilya.

I leave now the cases of correspondence between viii. and x., the remaining ones being common also to other books of the group viii., i., ix., x., and proceed to the parallels between viii. and i.

List iii.: Words occurring in RV. viii. and i., but not elsewhere in RV.

akṣna in *akṣnayāvan*, viii. 7. 35; *akṣnayādrūh*, i. 122. 9; *akṣnayā*, Brāh.

advayas, viii. 18. 6; i. 187. 3.

anasthā(n), viii. 1. 34; i. 164. 4; AV.

abandhū, viii. 21. 4; i. 53. 9; twice in AV.

abudhnā, viii. 66. 5; i. 24. 7.

ābhūjant, viii. 1. 6; i. 120. 12. Compare *abhūj*, x. 95. 11.

ari (= *ṛi*?) in compounds, only viii. 1. 22 (*aristutā*); i. 126. 5 (*aridhāyas*); i. 186. 3 (*arigūrtā*).

arkin, viii. 90. 13; i. 7. 1; 10. 1; 38. 15 ('having *arkā*, songs or beams').

avayātār, viii. 48. 2; i. 129. 11; AV. ii. 2. 2. Compare *avayāta-hēlas*, i. 171. 6; *avayāna*, i. 185. 8; AV. viii. 1. 6. The verb occurs in this sense in vi. 66. 5: *āva yāsād ugrān*; iv. 1. 4: *devāsya hēlō 'va yāsisisthāh*. On *avayātā(m)* in i. 94. 12, see PW.

[*avātā*, viii. 68. 7; perhaps with i. 38. 7; 52. 4; 62. 10; but doubtful (PW.)]

avisyā, viii. 45. 23; 56. 9; i. 189. 5; AV. iii. 26. 2; xi. 2. 2. The noun, *avisyā*, ii. 38. 3.

asmadrūh, viii. 49. 7; i. 36. 16; 176. 3.

aharēd, viii. 5. 9, 21; i. 2. 2; 156. 4. Compare *ahard'g*, viii. 55. 10. There is one more compound in RV., *āhardīvi*, ix. 86. 41, and AV. v. 21. 6, but none in the family books; all other compounds being in AV., VS., or later.

āhrutapsu, viii. 20. 7; i. 52. 4.

ādārīn, viii. 45. 13; *ādārā*, i. 46. 5; Brāh. etc. The verb (*āriyāte*) and the nominal compounds with *ā* are all of the Brahmanic and Epic age. In iv. 30. 24, *āduri* is probably, with Sāyana and in a better sense, to be derived from *dar*, 'break'; but the verse itself seems to be late. Compare *ādara*, *ādṛtya*, etc.

āyājī, viii. 23. 17; i. 28. 7.*

ārāṇa, viii. 59. 8; i. 112. 6 (*ārāṇa* and *ārā* are found in family books).

ācīrvant, viii. 84. 7; i. 23. 1; Sūtra.

[*iddhāgni*, viii. 27. 7; i. 83. 4; *sāmiddhāgni*, v. 37. 2; x. 63. 7. Clearly an accident, if v. 37 is early.]

īndratvota, viii. 19. 16; i. 132. 1; *īndradviṣṭa*, only in ix. 73. 5; *īndragopāh*, viii. 46. 32 (compare *īndragupta*, AV. xii. 1. 11). The form *īndratvota* may have changed accent and in reality be from *īndratva*, the Epic abstract.†

* But in ii. 9. 6, *āyajīṣṭha*.

† In Mbhā. appears *īndragopaka*, in the sense of Brāh. *īndragopa*, an insect (Cat. Brāh. xiv. 5. 8. 10). If *īndratvota* be from *īndra tvōta* (ii. 11. 16; PW.) the form is bizarre enough to be an unintelligent imitation.

upagroti, viii. 8. 5; 34. 11; i. 10. 3; twice in AV.; in Çat. Brāh., etc. Compare *upagrotār* in vii. 23. 1. The verbal combination is common in family books.

upahvarā, viii. 6. 28; 58. 6; 85. 14; i. 62. 6; 87. 2; Epic.

uṣṭra, viii. 5. 37; 6. 48; 46. 22, 31; i. 138. 2: compare *uṣṭār*, x. 106. 2. In viii., only in *dānastuti*. See final Note, p. 83.

ōdati (*uḍ*) viii. 58. 2; i. 48. 6.

kakṣyaprá, viii. 3. 22; i. 10. 3. Compare *kāmaprā*, i. 158. 2. For *kakṣyā* itself, a late word, see final Note, p. 77.

kadhapri, see *adhapriya*, in List i., above.

kāgāvant, viii. 25. 24; 57. 18; *kaçaplakāu*, ib. 33. 19 (three *dānastutis*). In viii. 33. 11; i. 22. 3; 37. 3; 157. 4; 162. 17; 168. 4, occurs *kāpā*; but also in v. 83. 3, besides *triṣaḥ* in ii. 18. 1. Possibly related are *kaçā*, a proper name, in viii. 5. 37, and *kaçikā*, i. 126. 6, 'weasel' (?). The word *kāçā* is common in later literature (Brāh., Epic). Comparing *kaçipā*, 'a mat' (AV.), the meaning 'plait, twine' (*kaçikā*, 'creeping sinuously?'), suggests itself as radical. The limitation of occurrences is of great interest, for the word is not infrequent; yet with the exception of v. 83. 3 it is confined in reality to i., viii., for the lateness of ii. 18 is clear at a glance. Moreover, of the hymns where *kāpā* occurs, that in which is found *kaçaplakāu* together with *kāpā* (viii. 33. 11, 19) is shown by *çāstrā*, verse 16, to be even later than most of viii. One is tempted, accordingly, to suspect that the occurrence of *kāçā* at v. 83. 3 may signify more than the other repeated coincidences between v. and viii.; but the suggestion of lateness for this Parjanya hymn (v. 83) will perhaps appear too heterodox. *Kāçā* is probably rather avoided than not known, and is an example of restraint in the use of common words, since elsewhere in the hymns there are often occasions where this word might be expected, as in the facing hymns. But such restraint would be almost as good a test of age as one could desire. As in English one might guess at the age of a religious book from the presence in it of words which a preceding generation would not have admitted into literature of this sort, e. g. the gospel hymn-book of the Salvationists, so the conventional language of the hymns may exclude what is later admitted into religious poetry.

gāyatrāvepas, viii. i. 10; i. 142. 12.

gōçrīta, viii. 21. 5; i. 137. 1.

chānda, viii. 7. 36; i. 92. 6 (*chandā*, vi. 11. 3, doubtful); Epic, as noun.

jañjanābhāvat, viii. 43. 8; *jāñjati*, i. 168. 7 (only parallel).

jālāṣabheṣaja, viii. 29. 5; i. 43. 4; AV.

jāmātar, *vijāmātar*, the former, viii. 2. 20; 26. 21, 22; the latter, i. 109. 2, ἀπ. λεγ. The former occurs in Smṛti, etc.

jihmābāra, viii. 40. 5; i. 116. 9. I think the only other form of *bāra* is *nīcīnabāra*, v. 85. 3; viii. 61. 10; x. 106. 10; another case of coincidence with v.

tanûkr't, viii. 68. 3; i. 31. 9; Sûtra. Compare *tanûkrthá*, viii.

75. 1, ἀπ. λεγ.; and final Note, p. 82, on the Avestan form.

tápurjambha, viii. 23. 4; i. 36. 16; 58. 5; always of Agni.

đidyagni, Vâl. 9. 2; i. 15. 11.

durmáda, viii. 2. 12; i. 32. 6; 39. 5; VS.; colloquial Epic. Com-

pare for meaning *sarūçá*, viii. 21. 14, ἀπ. λεγ.

devátta, viii. 32. 27; i. 37. 4. Compare *vásutti*, in List vii., below.

dravátpāni, of Agvins' steeds, viii. 5. 35; of Agvins, i. 3. 1.

Compare *draváccakra*, viii. 34. 18; but also *dravádagva*, iv. 43. 2.

dvīpá, viii. 20. 4; i. 169. 3; *dvīpín*, AV. Compare *nīpá*, Vâl. 1.

9; 3. 1; and *dhānu*, only in viii., i., x. But Roth reads *dvīyá* for *dvīpá* in viii. 20. 4.

dhítá, as noun, 'intent,' viii. 3. 16; 8. 10; 40. 3; 41. 1; i. 170. 1.

In the last case (with *đ*) the participle is half noun; in viii. it is wholly so.

dhṛṣanmanas, voc., viii. 78. 4; i. 52. 12.

nadīr't, viii. 12. 26; i. 52. 2.

namasyú, viii. 27. 11; i. 55. 4; Smṛti. Compare the new forms

manasyú, in x.; *apasyú*, in i., ix.; *makhasyú*, in ix., x;

gīrvanasyú, in x.; for *divasyú*, see List ii., above; *panasyú*,

v. 56. 9; *urusyú*, viii. 48. 5; *avisyú*, i. 189. 5; viii. 45. 23;

56. 9.

nṛvāhas, viii. 25. 23; i. 6. 2. In ii. 37. 5, *nṛvāhana*.

pandyya, Vâl. 9. 3; i. 160. 5; Brāh.

patayīṣṇú, viii. 27. 12; i. 163. 11; *patayīṣṇuká*, AV. vi. 18. 3.

Causals in *-iṣṇú* all belong to the later group, if I am not mistaken. The only early adj. not causal so made is *carīṣṇú*,

iv. 7. 9; vi. 61. 8; while like *patayīṣṇú* are *mādayīṣṇú*, only

i. 14. 4; viii. 71. 2; AV.; the unique *namayīṣṇavas*, voc.,

viii. 20. 1; *pārīyīṣṇú*, x. 97. 3; AV.; Brāh.; Epic; *tāpay-*

iṣṇú, x. 34. 7. Compare also the companion-piece to *carīṣṇú*

in *āmavīṣṇu*, x. 94. 11.*

patsutás, viii. 43. 6; i. 32. 8; compare *ἐπιτοδών*, but here adv.

from locative. This is the only form of this sort in RV.

Compare *hrttás*, *pattás*, in x.

pāpri, 'saving' in viii. 16. 11; i. 91. 21; AV.; and Brāh. As

'offering,' 'rich,' in early books.

pratádvasu, viii. 13. 27; *kṛtádvasu*, ib. 31. 9; and *çatádvasu*, i.

119. 1, are unique compounds and belong together. Early is

vidádvasu, i. 6. 6; iii. 34. 1; v. 39. 1; viii. 55. 1. Compare

ṛdhádrī, viii. 46. 23; *ṛdhádvāra*, vi. 3. 2. Of the same form

is the ἀπ. λεγ. *mandádṛira*, viii. 58. 1. Compare *kṣayádṛira*,

in List iv., below.

* There are two more forms of this sort, *poṣayīṣṇú* and *çocayīṣṇú*, both in AV. The observation above holds good only for causals. The other forms (here without *i*), *jiṣṇú*, *vṛdhasnū*, *carīṣṇú* appear in family books. In x., ix., and VS., respectively, are found *niṣatsnū*, *vadhasnū*, *danṣṣnū*.

(*pratár*), *supratár*, *prátūrti*, are implied in *suprátūrti* in iii. 9. 1. *prābhartar*, viii. 2. 35; i. 178. 3 (*prabhartavya*, Smṛti). The noun *prābharman* occurs in compound, v. 32. 4; otherwise only in viii., i., x.

pragdsana, viii. 61. 1; i. 112. 3; Brāh.; Epic. In the late hymn of priests' names, ii. 5, occurs *pragāstár*, vs. 4; elsewhere only in i. 94. 6; VS.; Brāh., etc. Compare the use of *gāstrá*, in RV. only in viii. 33. 16; of the verb *prá gās*, in i. and x. only; and of *pragis* in i., ix., x. only.

prāsti, viii. 7. 28; i. 39. 6 (100. 17); *prāstimant*, vi. 47. 24 (*dāna-stuti*, late); further in AV., Brāh., etc.

prāskanva, viii. 3. 9; Vāl. 3. 2; 6. 8; i. 44. 6; 45. 3; author of i. 44-50; ix. 95; Vāl. 1. Compare Kanva, son of Ghora, of Aṅgiras race, i. 36. 10-11; 48. 4; 112. 5; viii. 5. 23; 8. 4; AV.; plural, i. 14. 2; 47. 2; viii. 8. 3.

prāvargá, viii. 4. 6; *suprāvargá*, viii. 22. 18; *dāsápravarga*, i. 92. 8 (*prā* as in *prāyoga*, x. 106. 2).

bāhūtā, viii. 90. 2; i. 41. 2.

bhojyá, viii. 21. 8; i. 126. 6; 128. 5; Epic form.

mathrá, viii. 46. 23; i. 181. 5. Compare Aufrecht², Preface, p. iv. *mandádavira* and *mādayiṣṇá*, see above under *pratádvasu*, *pata-yiṣṇá*, respectively.

yavyábhīś, sic, viii. 87. 8; *yavyá*, i. 167. 4; 173. 12.

yahú, (vii. 15. 11;) viii. 4. 5; 19. 12; 49. 13; 73. 5; i. 26. 10; 74. 5; 79. 4.*

yuvagá, viii. 35. 5; i. 161. 3, 7. The formation, like that of *romagá*, *róman*, and *árvaga* or *arvagá*, *árvan*, is not found in other family books, unless *turvága* be a case, which, however, probably comes direct from *turvá* (not from *turván*), like *étaga* from *éta*.

ruvany, viii. 85. 12; *ruvanyá*, i. 122. 5; both only here.

vanín, viii. 3. 5; i. 64. 12; 119. 1; 139. 10; 180. 3 (?). But perhaps iii. 40. 7 also belongs here.

vásyatīsti, viii. 75. 2-3; i. 25. 4; 176. 1.

vājadāvan, viii. 2. 34; i. 17. 4. In Brāh., name of a Sāman, *vājadāvārī*.

vāsará, viii. 6. 30; 48. 7; i. 137. 3. A late word for 'day'; in RV. 'by day,' or 'clear' (Hillebrandt, *Ved. Myth.*, p. 26).

vibhindú, nom. prop., viii. 2. 41; adj., i. 116. 20; *vibhinduka*, nom. prop. (see PW.), Brāh.

vibhūta, in composition, *vibhūtarāti*, viii. 19. 2; *vibhūtadyumna*, viii. 33. 6; i. 156. 1. Common in later literature, to judge by the fact that *vibhūtamanas* is used to explain *vīmanas* in Nir.

vivásvan, viii. 91. 22; i. 187. 7.

viçvágurta, viii. 1. 22; 59. 3; i. 61. 9; *viçvagūrti*, voc., i. 180. 2.

* As for vii. 15. 11, as is well known, hymns 15-17 in this collection are late. See final Note (on *yazu*), p. 83.

- viçvatúr*, viii. 88. 5; i. 48. 16. SV. has a worse reading in the former passage. In ii. 3. 8, *viçváturti*.
viçvapús, viii. 26. 7; *viçvápús*, i. 162. 22.
vṛṣaṇagvā, viii. 20. 10; nom. prop., i. 51. 13, Brāh., etc.
vṛṣanvant, viii. 57. 18; i. 100. 16; 122. 3; 173. 5; 182. 1.
çatúparvan, see under *çatúbradhna*, List i. (above).
çuçukv(ni), viii. 23. 5; *çuçukvanā*, i. 132. 3 (late).
çvítna, *çvítnyā*, viii. 46. 31; i. 100. 18, respectively. The latter appears to be a late verse.
sacānas, (*sacānastamā*), *sācanas*, viii. 26. 8; i. 127. 11 (verb, *sacanasya*, x. 4. 3). In viii. 22. 2, *sacānāvant*. But in i. 116. 18; vi. 39. 1, *sacānā*.
sāmbhṛtāçva, viii. 34. 12; *sāmbhṛtakrato*, voc., i. 52. 8. These are both of Indra, and the only such compounds before Brāh., except *sāmbhṛtaçrī*, AV. xix. 49. 1.
sugāvyaṃ, viii. 12. 33; i. 162. 22. Compare i. 116. 25, *sugāva*. In Mbhā., *sugava* is a *karmadhāraya*.
sūgmya, viii. 22. 15; i. 48. 13; 173. 4.
sudṛyūt, viii. 23. 4; i. 140. 1; 143. 3.
suprāvargā, see *prāvargā*, above.
surūpā, viii. 4. 9; *surūpakṛtnū*, i. 4. 1; common adj. of the later period (not in AV.). The *kṛtnū* extension is found in the Talavakāra Brāh., vi. 155 (Burnell's MS.), *surūpakṛtnū*.
sūsāmskṛta, viii. 66. 11; i. 38. 12; Epic. Compare *sāmskṛta*, viii. 33. 9; v. 76. 2 (-*kṛtā*).
syprādānu, viii. 25. 5; i. 96. 3.
sōmakāma, viii. 50. 2; i. 104. 9; AV.
hāridravā, viii. 35. 7; i. 50. 12 (late). See Note, p. 79.
hīranyakeça, i. 79. 1; *hīranyakeçya*, viii. 32. 29=82. 24. Later, *Hiranyakeça*, *Hiranyakeçin*. In early form, *hārikeça*, of Agni, iii. 2. 13.

Somewhat over one-fifth of the forms here noted as common to viii. and i. alone are found in the hymns of the latter book ascribed to various Kāṇvas (12-23, 36-50). Occasionally a word like *arkīn* helps to show that hymns now placed before the Kāṇva collection of i. may have come from the Kāṇva family; thus this word *arkīn*, for example, occurs in hymns i. 7 and i. 10 as well as in 38, and would also indicate that viii. 90 comes, like other hymns of viii. ascribed to other than Kāṇvas, from the Kāṇvas. The hymns placed before the Vālakhilya furnish most of the correspondence with i., but the final hymns of viii. are also well represented. This indicates again (compare the observations on pp. 52, 55) that hymns viii. 1-48 are in general later than the hymns that now follow right after the Vālakhilya.

List iv.: Words occurring in RV. viii, i., and x., but not elsewhere in RV.

I take up now the common vocabulary of viii. and i., as it is shared by x. and ix. And first, the common vocabulary of viii., i., and x.

ajā, see note.*

adhvaragrī, viii. 4. 14; i. 44. 3; 47. 8; x. 36. 8; 78. 7.

anātūrā, viii. 47. 10; i. 114. 1; x. 94. 11; 97. 20. Compare *ātura*, only in viii. Both words occur in AV., and later *ātura* is common.

ānuvrata, viii. 13. 19; i. 34. 4; 51. 9; x. 34. 2; four times in AV.; in Brāh., Epic, etc. Compare *vīvrata*, below.

āparihvṛta, viii. 67. 8; i. 100. 19; 102. 11; x. 63. 5. Compare *parihvṛt*, ἀπ. λεγ. in viii. 47. 6 (but in vii. 82. 7; ix. 79. 2, *pārihvṛti*).

abhikhyā, viii. 23. 5; i. 148. 5; x. 112. 10; but *abhikhyātār* in iv. 17. 17.

irīṇa, viii. 4. 3; 76. 1, 4; i. 186. 9; x. 34. 1, 9; once in AV.; also in Brāh., etc.

udāra, viii. 1. 23; 2. 1; 17. 8 (*vapōdara*); 67. 7; 80. 5; i. 25. 15; 30. 3; 42. 9; 162. 10; x. 86. 23; AV., Brāh., etc. Both *udāra* and *jathāra* are in use in Smṛti. But in RV., the former is not found in other family books, and the latter is found but once in viii. (81. 23, plural). This coincides with AV., where *udāra* is used often and *jathāra* but thrice. With *vapōdara*, compare viii. 1. 23, *sphīrā*. For the Avestan correspondence, see final Note, p. 81.

kṣayādāvīra (compare *pratādvāsu*, in List iii., above), viii. 19. 10; i. 106. 4; 114. 1-3, 10; 125. 3; x. 92. 9.

kṣurā, viii. 4. 16; i. 166. 10; x. 28. 9. The word does not mean a razor, but a blade,—in i. 166 fastened upon a car-wheel (late); and so in viii. 4. 16, not scissors but a rapidly turning blade (AV. xx. 127. 4) is implied. In AV. it is the blade of an arrow. The word is old, but its special application is worked out differently in India and Greece.

[*candrāmas*, late word for 'moon,' v. 51. 15 (*sūryācandramās*, like *sūryāmās*, which, again, occurs only in viii., x.); i. 102. 2; x. 190. 3 (in both cases, *sūryācandramās*); and *candrāmas* in viii. 71. 8; i. 24. 10; 84. 15; 105. 1; x. 64. 3; 85. 19; 90. 13].

caritra, viii. 48. 5; i. 116. 15; x. 117. 7; AV. Later as 'behavior.' *dānisiṣṭha*, viii. 22. 1; 24. 25, 26; i. 182. 2; x. 143. 3.

* In viii. 41. 10; i. 67. 5; 164. 6; x. 82. 6, *ajā* means the 'unborn.' As this is a meaning used in later literature, the word deserves a place in the list. But other passages may be so interpreted, though the meaning here is that assigned by PW. and Grassmann to these passages alone.

- [*durhánā*, i. 38. 6; 121. 14; *durhanāy*, x. 134. 2; *durhanāyā*, in the late verse iv. 30. 8; *durhánāvant*, viii. 2. 20; 18. 14.]
- drāghūya āyuh*, viii. 18. 18; the phrase completed by *jīvāse*; in i. 53. 11; x. 18. 2-3; 115. 8, by *pratarān dādhanāh*. The same phrase in AV., Brāh.; not elsewhere in RV. Even *drāghūyas* happens to occur, in other application, only in x. Several other late forms occur in the same hymns of viii.
- dhānu*, viii. 3. 19; i. 33. 4; 144. 5; x. 4. 3; 27. 17. Compare *dvīpā* in viii., i. Compare also *dhanus* in Manu. Both late and early is the related *dhānvan*.
- dhūmāketu*, viii. 43. 4; 44. 10; i. 27. 11; 44. 3; 94. 10; x. 4. 5; 12. 2. In RV., epithet of Agni. Later, Epic, 'comet.*' The idea is given (*dhūmās te ketūh*) in v. 11. 3.
- nimrūc*, viii. 27. 19; i. 151. 5; 161. 10; x. 151. 5; AV.; Brāh.
- parvācās*, see final Note, below, p. 75.
- pārçu*, viii. 6. 46; i. 105. 8; x. (33. 2); 86. 23; (*pṛthupārçu*, vii. 83. 1). It is questionable whether in the last passage *pārçu* is ax or people.
- pāy*, see *pāyatnū* in List i., above.
- pūrvāpīti*, viii. 3. 7; i. 19. 9; 134. 1; 135. 1; x. 112. 1. With the exception of the last passage, where the nominative is used, always *pūrvāpītaye*. Compare *pūrvāpītya* only in viii. 34. 5. Early are *pūrvapā* and *pūrvapēya*.†
- prāyati*, viii. 58. 18; i. 109. 2; 126. 5; x. 129. 5. The corresponding nomen agentis occurs in early books.
- prayūj*, viii. 37. 5; i. 186. 9; x. 33. 1; 77. 5; 96. 12; AV. In the first passage *prayūj* (like *prāyukti*, *yōga*) is 'activity,' as opposed to *ksēma*; in the other passages, 'team.'
- prasrāvana*, viii. 33. 1; 54. 2; i. 180. 8; x. 148. 2; common in the Epic. In viii. 89. 9, *purāḥprasrāvana*, ἀπ. λεγ.
- [*phēna*, 'foam,' in the late verse iii. 53. 22; otherwise only in viii. 14. 13; i. 104. 3; x. 61. 8; AV., etc. Probably, however, the omission is not significant, as the meaning would not often have to be expressed.]
- bāhvōjas*, viii. 20. 6; 82. 2; i. 135. 9; x. 111. 6; adj. except in 82. 2.
- bṛhādbhānu*, viii. 78. 2; i. 27. 12; 36. 15; x. 140. 1.
- māde-māde*, viii. 13. 7; i. 81. 7; x. 120. 4.
- mānavas*, the plural of *mānu* occurs only viii. 18. 22; i. 89. 7; 96. 2; x. 66. 12; 91. 9; twice in AV.
- mandhātār*, viii. 39. 8; 40. 12;† i. 112. 13; x. 2. 2; nom. prop., Epic *māndhātār*.
- rudrāvartanī*, viii. 22. 1, 14; i. 3. 3; x. 39. 11; VS. Compare *kṛsnāvartanī* in viii.; *raghāvartanī* in viii., ix.
- romaśā*, viii. 31. 9; 80. 6; i. 126. 7; x. 86. 16; post-Rik (Epic). For *rōman* is found *lōman* only in x.

* Compare Weber, *Om. Port.*, p. 397.

† Compare *pūrvācīttaye* in List v. (below).

‡ Here as *mandhātṛvāt*. In 43. 13 in one verse occur *bhṛguvāt*, *manuśvāt*, *aṅgirasvāt*.

vīvrata, viii. 12. 15; i. 63. 2; x. 23. 1; 49. 2; 105. 2 (all these of *hārī*); x. 105. 4, of rivers; ib. 55. 3, of light. The only other passage cited is AV. iii. 8. 5. Compare *ānuvrata*, above.

vīgvaka, viii. 75. 1; i. 116. 23; 117. 7; x. 65. 12. For the ending see under *anyakā*, List ii., above.

[*vrā*, in the mystic verse iv. 1. 16; otherwise only viii. 2. 6; i. 124. 8; 126. 5; x. 123. 2; AV.]

gāmtāti, viii. 18. 7; i. 112. 20; x. 137. 4.

gvātrā, viii. 52. 5; i. 31. 4; x. 88. 4. Compare *gvātrabhāj*, viii. 4. 9, *āp. ley.*; and *gvātrya*, x. 49. 10; 106. 2; 160. 2. Not in AV., but in VS.

haviṣkṛt, viii. 49. 15; 91. 13; i. 13. 3; 166. 2; x. 66. 6. Compare *-kṛt*, i. 18. 8; 93. 3; x. 91. 11; *-patī*, i. 12. 8; *-pā*, x. 15. 10; *-vāh*, i. 72. 7; *haviṣād*, x. 15. 10; *haviṣmāthi*, vii. 104. 21, late. Also in the family books, *haviṣādya* and *haviṣdā*.*

List v. : Words occurring in RV. viii., i., and ix., but not elsewhere in RV.

anukāmā, viii. 48. 8 (adv., as in *anuvācam*, *āp. ley.* in viii. 86. 3); 81. 13; i. 17. 3 (adv.); ix. 11. 7; 113. 9 (late).

gātra (for earlier *āṅga*), viii. 17. 5; 48. 9; i. 162. 11, 19, 20; ix. 83. 1; seven times in AV.; and in all subsequent literature. Decidedly late is i. 162.

dohāna, viii. 12. 32; i. 144. 2; ix. 75. 3. Compare the late word *dōha*, only in x. 42. 2; *dōhas*, only in vi. 48. 13 (*vīpṛā*, late ?);† viii. 58. 3 (*sūda*-); x. 11. 1. The first word is Brahmanic, Epic.

[*naptī*, viii. 2. 42; i. 50. 9 (Kāṇva hymn); ix. 9. 1; 14. 5; 69. 3; three times in AV.; and also in the first verse of the markedly late hymn RV. iii. 31 !] ‡

payovādh, viii. 2. 42; i. 64. 11; ix. 74. 1; 84. 5; 108. 8. This and the last word are from the same (*dānastuti*) verse (2. 42); but the whole hymn appears to be as late as the tag.

pāri pū, viii. 2. 2; i. 135. 2; ix. 69. 3; 98. 7. The combination is common in Sk., where *paripāta* is colloquial and technical both. In RV., only viii., i., and ix. have the compound.

* The compounds increase rapidly in subsequent literature; and *haviṣkṛt* itself occurs four times in AV. alone; though never in RV. ii.-vii.!

† This verse is expunged by Grassmann because of its metre and interference with the strophic arrangement.

‡ In some of these cases, especially in ix., where the fingers and hands are called by this name, *naptī* seems to me to have lost all sense of relationship ('daughter') and to be equivalent to 'girl' or 'young woman.' In the late verse viii. 2. 42 also this seems to be the meaning. The poet praises the gift of two young women (as in 46. 33) whom he terms *rāṇasya naptīyā*, i. e. *filles de joie*.

pūrvācittaye. As *pūrvāpīti* occurs only in viii., i., and x. (above), so *pūrvācittaye* (sic) occurs only in viii. 3. 9; 6. 9; 12. 33; 25. 12; i. 84. 12; 112. 1; 159. 3; ix. 99. 5. The word is not found in RV. in other cases; but later the word (in nom. etc.) is the name of a nymph.

yōjana, in the meaning 'preparation' (of song, like *svṛktī*), is found only in viii. 79. 3; i. 88. 5; ix. 7. 1; 102. 3. The meaning 'preparation' is common in the Epic, and occurs in Sūtra.

vacovād, viii. 90. 16; i. 91. 11; ix. 64. 23; 91. 3.

vyagva(vāt). This man and his progeny and imitators are referred to in viii. 9. 10; 23. 23; 24. 22; 26. 9; i. 112. 15; ix. 65. 7 (a Kāṇva hymn). Compare *vāiyagvā*, in hymns of viii.

cyendbhṛta, viii. 84. 3; i. 80. 2; ix. 87. 6.

sakṣāṇi (from *sah*), viii. 24. 26; i. 111. 3; ix. 110. 1. In v. 41. 4, occurs *sakṣāna*. In viii. 59. 8, *sakṣāṇi* (*sac*) should be compared with 22. 15.

snāhiti (v. l. *snēhiti*), viii. 85. 13; i. 74. 2; verb, in ix. 97. 54. Later, the verb is common. Verb and derivative in RV. appear only here.

List vi.: Words occurring in RV. viii., i., ix., and x., but not elsewhere in RV.

adās, adv., viii. 10. 1; 26. 17; i. 187. 7; ix. 65. 22; x. 72. 6; 155. 3; 186. 3; AV.; Brāh.

ayāsya, viii. 51. 2; i. 62. 7; ix. 44. 1; x. 67. 1; 108. 8; 138. 4; as nom. prop., reputed author of ix. 44-46; x. 67-68; common word in Brāh. Windisch., KZ. xxvii. 171, connects with *aiḡjios*. In the other family books, *ayās*.

ātmán. This word occurs but twice in the family-books, ii.-vii. In vii. 87. 2, *ātmā te vātaḥ*, the word must mean 'breath.*' In the mystic Parjanya hymn, vii. 101, a phrase of the sixth verse (=i. 115. 1) makes Parjanya (or, in i. 115, the sun) the 'self or soul of the world.' So in i., ix.,† and x., while not entirely losing the more primitive signification, *ātmán* has the later meaning of 'spirit' or 'soul.' In viii., this meaning occurs once, namely, in 3. 24 (*dānastuti*). For the other cases, see Grassmann. The form *tmán*=*ātmán* occurs in the family books, in the meaning 'self' (reflexive—not 'soul'); but not in viii. I exclude *tmānā*, as not belonging to *tmán*.]

keśirā, viii. 2. 9; i. 104. 3; 164. 7; ix. 67. 32; x. 87. 16; *keśira-pākām*, viii. 66. 10, common in AV., Brāh., Smṛti.

* This, however, does not appear to be an early hymn.

† ix. 2. 10; 6. 8 (74. 4; 85. 3); 113. 1.

gāthā, gāthā. (Compare *gāyatrā*.) Significant of the relation between viii. and later literature is the fact that *gāthā, gāthā*, is a common Brahmanic word, that it is used several times in AV., that it occurs quite frequently also in RV. viii. i., ix., and x., and is yet almost unknown to the family books ii.-vii. In fact, save in the late hymn v. 44 (*rjagātha*, vs. 5), there is not a single occurrence of *gāthā, gāthā*, in these books. In the group of books now under consideration *gāthā* occurs at i. 167. 6; ix. 11. 4; *gāthāpati*, i. 43. 4; *gāthāgravas*, viii. 2. 38; *gāthā*, viii. 32. 1; 60. 14; 87. 9; ix. 99. 4; x. 85. 6 (with *nārācaṁsī*); *gāthāni*, i. 190. 1; viii. 81. 2; the Epic *gāthān*, at i. 7. 1. In view of the revival of the word in AV., Brh., etc., the total absence of *gāthā, gāthā* in ii.-vii. (barring the sole exception just mentioned), and the occurrence of the word and its nearest kin in i., viii., ix., and x. is most noteworthy and significant.*

gāyatrā. (Compare *gāthā*.) The treatment of *gāyatrā, -trī*, is parallel with that of *gāthā* barring Iranic relations. *gāyatrā* is common in the later literature, not uncommon in AV., and not uncommon in RV. viii., i., ix., and x.; while in ii.-vii. it is found only in the notoriously late hymn, ii. 43.† Apart from that passage, the occurrences are: i. 12. 11; 21. 2; 27. 4; 38. 14; 79. 7; 120. 6; 164. 23, 24, 25; 188. 11; viii. 1. 7, 8; 2. 14; 16. 9; 38. 10; ix. 60. 1; x. 71. 11; *gāyatrī*, x. 14. 16 (AV. xviii. 2. 6) and 130. 4; *gāyatrādvartanī*, viii. 38. 6; *gāyatrāvepas*, i. 142. 12; viii. 1. 10; *gāyatrīn*, i. 10. 1. The word *gāyatrī*, as a name for RV. iii. 62. 10, is not Vedic.

grābhā, viii. 70. 1; ix. 106. 3; AV. xiv. 1. 38; *udagrābhā*, RV. ix. 97. 15; *grāvagrābhā*, i. 162. 5; *hastagrābhā*, x. 18. 8.

tīrthā (and *satīrthā*). This word for 'crossing' or 'ford' occurs commonly from AV. on through later literature. So far as the literal meaning goes, it may mean a place to cross anything, but its special signification obtains in RV. In iv. 29. 3 there is one case where the more general (older) meaning applies. Here, *tīrthā*, in *satīrthā*, seems to mean a 'good path.' In viii. 47. 11, the same form may mean a 'good path' or a 'good ford.' But *tīrthā* itself means a ford in i. 46; once or twice in x.; and in viii. 61. 7, *tīrthē śindhora dhi svarē*. The word occurs as above and i. 46. 8 (a Kāṇva hymn); 169. 6; 173. 11; ix. 97. 53; x. 31. 3; 40. 13; 114. 7.

trivṛt, see *khēdā*, in List ii., above.

trīṣṭūbh, see List viii., below.

* Oldenberg, ZDMG. xxxviii. 439-64, seeks to explain the phenomena by the fact that viii. is especially a *Sāman*-book. But this does not explain, e. g., why *gāyatrā* occurs in just the latest part of viii.

† In vs. 1, of the bird of evil omen. The hymn is the last of the book, and of distinctly Atharvan character. The words are: *udhē vācāu vadatī sāmaga iva gāyatrām ca trīṣṭubham cānu rājati*.

nins, viii. 43. 10; i. 144. 1; ix. 85. 3; x. 74. 2; 92. 2; 94. 9. The word does not occur in AV., and is not cited from Bräh., but it appears in Pāṇini. The Epic word for 'kiss' occurs in i. 185. 5, *ghrū* (with *abhī*, as in Bräh.; but in Epic with *ava*, *ā*, *upā*, *sanā*, etc.).

[*prtany*. In ii. 8. 6, the last verse of the hymn, there is a sudden change of metre from *gāyatrī* to *anustubh*. Note also that pāda *a* has the Epic cadence. If these may be taken as indications that the sixth verse is not part of the original hymn, the rejection of the verse removes the only exception to the rule that *prtany* occurs in the group i., viii., ix., x., alone. The adjective *prtanyā* occurs in the early books (iv. 20. 1; vii. 6. 4); but of these at least the latter hymn would seem to be late. The verb occurs as follows: ii. 8. 6 (see above); viii. 40. 7; 75. 5 (both ptc.); i. 8. 4 (ptc.); 32. 7; 54. 4; 132. 1 (ptc.); 6; ix. 35. 3 (ptc.); 53. 3; 61. 29 (ptc.); x. 27. 10; 43. 6 (ptc.); 152. 4 (ptc.); 174. 2 (ptc.); and nine times besides in AV.]

priyā (compounds). A formation common in Smṛti. Compare Epic *priyakara*, *priyakāraka*, *priyadarṣa*, *priyadarṣana*, *priyavāda*, etc. In AV., VS., and Brähmaṇa, these compounds are also not uncommon. Compare *priyādhāman*, *priyātanu*, *priyāvādin*, *priyāpati*. This is a formation* known in RV. only to books viii., i., ix., x. Compare *priyaksatra*, voc., viii. 27. 19; *priyajāta*, voc., viii. 60. 2; *priyādhāma*, i. 140. 1; *priyāratha*, i. 122. 7; *priyāvraṭa*, x. 150. 3 (and Bräh.); *priyasā*, ix. 97. 38; *priyāstotra*, i. 91. 6; *priyōsriya*, x. 40. 11. Compare also the name Priyāmedha (author of hymns in viii. and of ix. 28, and, in plural, name of his race): i. 139. 9; viii. 5. 25; plural, i. 45. 4; viii. 2. 37; 3. 16; 4. 20; 6. 45; 8. 18; 58. 8, 18; 76. 3; x. 73. 11; *priyāmedhavāt*, i. 45. 3; *priyāmedhastuta*, viii. 6. 45; *prāyamedha*, Brähmaṇas.

madacyūt, viii. 1. 21; 7. 13; 22. 16; 33. 18; 34. 9; 35. 19; 63. 13; 85. 5; i. 51. 2; 81. 3; 85. 7; 126. 4; ix. 12. 3; 32. 1; 53. 4; 79. 2; 108. 11; x. 30. 9; *mādacyuta*, ix. 98. 3.

(*madintara*) *madīntama*, viii. 1. 19; 13. 23; 24. 16 (*madīntara*); 53. 11; i. 91. 17; ix. 15. 8; 25. 6; 50. 4, 5; 62. 22; 67. 18; 74. 9; 80. 3; 85. 3; 86. 1, 10; 96. 13; 99. 6; 108. 5, 15; x. 136. 6. With the exception of viii. 13. 23; x. 136. 6; AV. xi. 7. 7; always of *soma*. The comparative occurs only in viii. 24. 16. *meṣā*, *meṣā*, and *varāhā*. Indra is a ram in viii. 2. 40; 86. 12; Indra or Rudra, i. 51. 1; 52. 1. The Aṅvins appear 'like two rams' in the spiritless similes of x. 106. 5; and their

* That is, with *priyā* as first member of the compound. For the others, compare *adhapriya*, *kadhapriya*, and *kadhapri*, only in viii. and i., List iii. The two other compounds show the partiality of the Kāṇvas for *priyā*. The first, *haripriya*, voc., occurs only in iii. 41. 8; the second, *purupriyā*, occurs in iii. 3. 4; v. 18. 1; viii. 5. 4; 12. 10; 18. 4; 81. 14; 43. 31; 63. 1; i. 12. 2; 44. 3; 45. 6 (Kāṇva hymns).

protégé offers rams, i. 116. 16; 117. 17, 18. In ix. 8. 5; 86. 47; 107. 11, it is the 'wool of the ewe' (*meṣī*) that takes the place of that of the usual *divi*. The remaining cases of *meṣā*, *meṣī* are i. 43. 6; x. 27. 17; 91. 14.

A similar state of things is found in the use of *varāhā*. The word or form *varāhu* occurs i. 88. 5; 121. 11; *varāhā*, in viii. 66. 10; i. 61. 7; 114. 5; ix. 97. 7; x. 28. 4; 86. 4; 99. 6. The foe of Indra, Vṛtra, is *varāhu*, and the *varāhā* of i. 61. 7. Rudra is a boar in i. 114. 5. In ix. 97. 7, the boar is Soma. Only in x. 28. 4; 86. 4 (*varāhayā*) is *varāhā* certainly an earthly boar. In x. 99. 6, the boar killed by Trita is the same demon as that killed by Indra. In viii. 66. 10, the boar seems to be an earthly one, but may possibly refer to a god.* Thus the old word 'boar' is employed in a new literary (religious) sense to describe gods or demons. The use here is that of i., ix., x., and possibly viii.; but not that of the books ii.-vii., which do not use the word. It is scarcely necessary to add that, in giving the title *varāhā* to divinities, the RV. for the first time in this regard is here in touch with later religious conceptions. The boar of i. 114. 5 is not, however, that of later mythology.

vāṇā, viii. 20. 8; i. 85. 10 (PW.); ix. 97. 8; x. 32. 4; AV. x. 2. 7 (*bāṇā*); and Brāh. It is in respect of the use of this word (in the meaning 'music'), and not in respect of the mention of music, that these books are here distinguished from ii.-vii.; for in the latter, *vāṇā* may at times be the equivalent of *vāṇā*. *viṣṭāp*, viii. 32. 3; 34. 13; 58. 7; 86. 5; i. 46. 3; ix. 12. 6; 34. 5; 41. 6; 107. 14; x. 123. 2; AV. quinquies; Brāh.; Sūtra. Compare also *viṣṭāpa* (Lanman, *loc. cit.*, p. 481), only viii. 80. 5; ix. 113. 10; AV. (*viṣṭāpa*, *vāiṣṭāpā*, each once); Brāh.; Smṛti. Compare also *viṣṭambhā*, in ix.; AV.; Brāh.; Smṛti; i. 46 is a Kāṇva hymn.

gāryandvant (-*vatī*), viii. 6. 39; 7. 29; 53. 11; i. 84. 14; ix. 65. 22; 113. 1; x. 35. 2. Compare *ārjīkā*, in List vii., and *ārjīkīya*, in List viii., below.

hitā. The surprising use of *dhita* in viii. 51. 3 (List i., above), a use that is paralleled only in Brāhmaṇas and Smṛti, leads to the question whether there is a difference between *hitā* of the early books and *hitā* of the late. In viii. 43. 25; 49. 4; i. 166. 3; ix. 25. 2; 44. 2; 68. 7; 70. 10; 86. 13; x. 71. 10; 140. 3, *hitā* comes from *hi*. Everywhere else it seems to come from *dhā*.†

* The boar in i. 61. 7 is apparently Vishnu, and possibly viii. 66. 10 has reference to the same obscure legend. That the latter passage is late is attested by *kṣīrapāka* and *odanā* in the same verse, with *sū-saṁskṛta* in the following, the two making an addition, in different metre, to the original hymn. Possibly in ii. 14. 4 the *ūrāpa* may be identical with the demon elsewhere slain by Indra, but there is nothing to indicate this.

† In the assignment of these forms to *hi* or *dhā*, the PW. (an unprejudiced critic) has been followed by me. At ix. 21. 4, the case is doubtful. The later Smṛti meaning, 'agreeable,' is rare; but is probable at v. 42. 3; in the late iv. 57. 1; perhaps also at viii. 25. 7, and a few places in x.

A comparison of cases of verbal agreement (Lists iii.-vi.) shows that after the sixty-fifth hymn of the first book the parallelism with the eighth suddenly ceases, or almost ceases, to be resumed, with less striking effect than in the first part of the book, with the eightieth hymn of i.; and that a corresponding blank occurs between hymns 145 and 161, when a close parallelism begins again. The last lists bear out the observation made above, that in general the first half and the very last hymns of viii. show closest connection with other late parts of RV.

List vii.: Words occurring in RV. viii. and ix., but not elsewhere in RV.

ajirāgocis, viii. 19. 13; ix. 66. 25. Compare *grēṣṭhaḡocis*, viii. 19. 4, *ām. ley.*

āniṣkṛta, see List viii., below.

apsujāt, viii. 13. 2; 36. 1; ix. 106. 3. Compare *apsujā*, viii.; *apsukṣīt*, i. 139. 11.

āsprta, viii. 71. 9; ix. 3. 8; of Soma.

ārjika, compare *ārjikiya*, in List viii., below.

upadīḡ, viii. 91. 15; ix. 54. 2.

urūdhāra, viii. 1. 10; 82. 3; ix. 69. 1; Sūtra.

kraks, *avakraksin*, viii. 1. 2; *krākṣamāna*, viii. 65. 11; *vana-kraksā*, ix. 108. 7.

tatā, viii. 80. 5, 6; ix. 112. 3; AV., etc.

tīpti, viii. 71. 6; ix. 113. 10; AV. Later this is a common word.

durōṣa, late form for *durōṣas*, viii. 1. 13; ix. 101. 3.

dvayū (*ādvayū*), viii. 18. 14, 15; ix. 104. 6; 105. 6.

dhijāvana, viii. 5. 35; ix. 88. 3; 97. 49; *dhijā*, ix. 86. 1, 4.

nāvā, viii. 25. 11; ix. 45. 5.

parisrūt, viii. 39. 10; ix. 1. 6; 68. 1; VS.; later, name of a drink (AV., Brāh.).

bhandānā, *bhandanāy*; the noun, in viii. 24. 15, 17; ix. 86. 41; the verb, in ix. 85. 2. Early is *bhand*.

mādvān, viii. 81. 19; ix. 86. 35.

manāv ādhi, a phrase (accent!) that occurs only in viii. 61. 2; ix. 63. 8; 65. 16.

raghūvartani, viii. 9. 8; ix. 81. 2. Compare *rudrāvartani*, in List iv.

rasin, viii. 1. 26; 3. 1; ix. 113. 5; VS. As in Smṛti, 'tasteful.'

vāsutti, viii. 50. 7; ix. 44. 6. So *devātta* (List iii.) occurs only in viii. and i.; and *bhāgatti* only once, in ix. 65. 17; while *maghātti* occurs in viii. 24. 10; 45. 15; 59. 9; x. 156. 2; but also in iv. 42. 8 and v. 79. 5. The former of the two last passages is late. The latter remains a lone parallel in v. to the usage of the later group, as often.

vasurūc, ix. 110. 6; *vāsurocis*, viii. 34. 16. In AV., viii. 10. 27, *vāsuri*, name of a Gandharva.

vāra, as 'sieve,' viii. 2. 2; ix., passim; perhaps in i. 132. 3; in Brāh., *vāla*.

vīrayá, viii. 81. 28 ; ix. 36. 6. The substantive, vii. 90. 1 (*vīrayá*) ; ix. 64. 4. The verb, *vīray*, i. 116. 5 ; x. 103. 6 ; 128. 5 ; Brāh.

ṣatāvāja, *ṣatāmagha*, see List i. (above).

sāṁvasu, viii. 39. 7 ; AV. ; *sāṁvāsana*, ix. 86. 17.

saṁśigraṇ, in phrase, viii. 58. 11 = ix. 61. 14. Compare i. 65. 4, *sūgigvi*.

sahāsroti, viii. 34. 7 ; ix. 62. 14 (in i. 52. 2, *sahāsramāti*).

svārpati, viii. 44. 18 ; 86. 11 ; ix. 19. 2 ; Smṛti.

svātatu, viii. 66. 6 ; ix. 74. 2.

hētúr [compare *prahetúr* in List i. above], viii. 88. 7 ; ix. 62. 6 ; *hetúr*, ix. 13. 6 ; 64. 29.

List viii. : Words occurring in RV. viii., ix., and x., but not elsewhere in the RV.

[*āniṣkṛta*, etc. With the exception of *īṣkṛta* at vii. 76. 2 (where the poet alludes to the 'poets of old' as if he himself were a later one), all cases of the late and misbegotten *īṣkṛ*-forms occur where we should expect them, in viii., i., ix., and x. They are plainly due to the misapprehended *a-nīṣkṛta* forms, felt as if made up of the elements *an-* and *-īṣkṛta*.* The occurrences—of every sort—are worth locating. Most notable is the collocation *īṣkartāram āniṣkṛtam*, viii. 88. 8 ; less so, (*parīṣkṛtvānn*) *āniṣkṛtam*, ix. 39. 2, the only form of this ilk in ix. Further, we find : *īṣkartár*, x. 140. 5 ; *īṣkartar*, viii. 1. 12 ; 20. 26 ; *īṣkṛta*, vii. 76. 2 ; *īṣkṛnūdhvam*, x. 53. 7 ; 101. 2 ; *īṣkaram*, x. 48. 8 ; *īṣkṛti*, x. 97. 9 ; *īṣkṛtāhāva*, x. 101. 6.]

asastihān, viii. 78. 2 ; 88. 5 ; ix. 62. 11 ; 87. 2 ; x. 55. 8.

ārjiká, viii. 7. 29 ; ix. 65. 23 ; 113. 2 ; *ārjikīya*, viii. 53. 11 ; x. 75. 5. See Hillebrandt, *Ved. Myth.*, p. 137.

trīṣṭūbh, viii. 7. 1 ; 58. 1 ; ix. 97. 35 ; x. 14. 16 ; 130. 5. *Trīṣṭubha* occurs in i. 164. 23, 24 and ii. 43. 1 (both hymns are indubitably late), and in v. 29. 6.

durmārṣa, viii. 45. 18 ; ix. 97. 8 ; x. 45. 8 ; Puranic in the sense 'unendurable.'

yāvamant, viii. 82. 3 ; ix. 69. 8 ; x. 42. 7 ; 131. 2. Compare *yavayá*, only in viii. 67. 9.

yāc, viii. 1. 20 ; 2. 10 ; 56. 1 ; ix. 78. 3 ; 86. 41 ; x. 9. 5 ; 22. 7 ; 48. 5 ; about a dozen times in AV. ; common in Brāh. and Epic. The late poets use both the older form (*tāt tvā yāni*, viii. 3. 9) and the stronger *yāc*, which latter is unknown to, or at least not used by, the older poets.†

* Compare Lanman, *loc. cit.*, p. 475 ; Bloomfield, PAOS., March, 1894, =Journal, xvi., p. cxxvi ; and Scott, *Transactions of the Am. Philol. Assoc.*, xxiii. 179 ff, who gives a mass of examples, for instance, *an adder* = *a nadder*.

† In either case, viii. shows a distinct advance toward classical usage. The old Bhaga worshipper says : *bhāgam ānugro dāha yāti rātnam* (vii. 88. 6) ; the later *ānugra* says rather : *kā īcānam ná yāciṣat* (viii. 1. 20).

yāthyā, Vāl. 8. 4; ix. 15. 4; x. 23. 4; Brāh., Epic.

rathary, viii. 90. 2; ix. 3. 5; x. 37. 3. Compare *vadhary*, only i. 161. 9, *grathary*, only x. 77. 4. The only old parallel is *sapary*.

lokā. With the exception of the late hymn, vi. 47 (Lanman, *loc. cit.*, p. 578), no hymn of the early books has the form *lokā* (vi. 47. 8). But *lokā* is the form in viii. 89. 12; ix. 113. 7, 9; x. 14. 9; 85. 20, 24; 90. 14; AV.; Brāh.; Smṛti. The compounds vary according to the position of the word: *ulokakṛt*, ix. 86. 21; x. 133. 1; *ulokakṛtnā*, viii. 15. 4; ix. 2. 8; *urūloka*, x. 128. 2; *jivalokā*, x. 18. 8; *patilokā*, x. 85. 43. The AV. has the last three, and six more such compounds; changing *ulokakṛt* to *lokakṛt*, and having also one more compound like it, *lokajit*.* As ix. 113. 7, 9 and x. 90 are certainly late, the supposition must arise that viii. 89. 12 and x. 14. 9 belong to the same period. x. 85 has such a mixture of old and new that it has no weight in the scale. In sense, *ulokakṛt* is like *urukṛd urū nas kṛdhi*, viii. 64. 11 (compare *urūloka*, x. 128. 2). *vṛṣṭimānt*, viii. 6. 1; ix. 2. 9; x. 98. 8; Brāh.; Epic.

A comparison of the words in viii. and ix. shows that the group beginning with ix. 107 exhibits the closest resemblance to viii. The long hymn ix. 86 shows more correspondence than all the dozen preceding it, perhaps merely on account of its length. The cut-up hymns beginning with ix. 96 show very marked similarity. This hymn is ascribed to a Kāṇva, and has signs of the relation; yet the Priyamedha of ix. 28 leaves no verbal sign; but he has the phraseology, which reappears, though not exclusively there, in viii. 15. Nor does the Medhyātithi of ix. 42 and 43 use the special vocabulary of viii., though there is one token in 41, also ascribed to him. The Kācyapa of ix. 53 has something in common with viii.; but even more has the Bhṛgu of ix. 82. In ix. 94 and 95, Kāṇva hymns, there is a remarkable absence of similarity. In fact the latter is marked by an older use (*jaṭhāra*) as against that of viii.; and it is quite possible that these are earlier hymns of the Kāṇva family. Suggestive is the fact that in general the latter half of ix. has a much closer verbal correspondence with viii. than has the prior portion; probably because this latter half is the later, especially in the group, ix. 107 ff.

Ludwig, *Rig Veda*, vol. iii., p. 161, doubting Grassmann's doubt in regard to the antiquity of the verse that contains *pūjana*, says

* The modern explanation that *u* is a Tamil-like prefix, before *l*, does not seem to be supported by the evidence. But it is not a question of derivation; it is merely a question of historical literary form. And here it is evident, since *lokā* is used in late literature and only *ulokā* (fifteen times) in the early books ii.-vii., that *ulokā*, whether the original or only a contraction of two words, is the earlier form in Vedic phraseology. This older *ulokā* survives in i. 93. 6; ix. 92. 5; x. 18. 2; 16. 4; 30. 7; 104. 10; 180. 3. For the form, see IF. ii. 10; ZDMG. xli. 499; xlii. 152.

rather desperately : “*pūjana* did not fall from heaven;” meaning apparently that it must have been always in existence, and that it is folly to reject a verse of the RV. because it appears from its vocabulary to be late.

Words are of two sorts, simple and compound. The latter certainly have historical beginnings, and can often be traced back to them. The former do not, indeed, fall from heaven; but they often spring up from the earth; and new words, to which it is frequently futile to ascribe old roots, may rise and flourish without literary, and even without real historical background of any sort. In a literary age, such words are called slang. Some of them die soon; some live on, become respectable, and then become literary factors. In an age that is not critical such words must still more often become absorbed into the literature. This *pūj*, or any such word, may have had its origin at any given time and be without historical antecedents. For this reason it is perfectly legitimate to question the antiquity of any fragment that contains words which do belong to a later age and are not found anywhere else in the age to which the fragment is ascribed. Especially is this the case when the fragment is part of a large body of literature and the word is one which from its meaning would naturally have been employed often in that literature, as it is in the later literature where it is current.

When a large body of words is found at the end of a certain literary period, when this body is found continuously employed from the said end of a period to one that is much later, then in the first period any one book that contains a vocabulary identical with that of the books constituting such end of a period will probably belong to the conclusion of the period rather than to its beginning.

If this be so, then the eighth book of the Rig-Veda, in its vocabulary, which agrees in so many details with the vocabulary of the later books of that work, with the later Atharvan, and with the still later Brāhmaṇas and Epic, probably stands nearer to the end of the period represented by the whole Rig-Veda than to the beginning of that period.

In the case of such a phrase as *mā no nidrā īyata mōtā jālpīh*, if the reader were asked to assign it to a date, he would observe first that the later common root *jālp* is found in the Rig-Veda only here (as noun) and in x. 82. 7. He would remark again that *nidrā* is what may be called a thoroughly Smṛti word, that is, it is a noun customary and colloquial in the Epic and later literature, while it is utterly unknown in the Vedic language, so much so that even the root is unknown in the Rik, save for this passage, and the combination *ni drā* as a verb begins first in the Brahmanic period. It is of course barely possible, on the assumption that viii. is antique, that *nidrā* is thus used once in the earliest literature and never appears again till the Smṛti period, and that in the meantime *drā+ni* is developed as a verb. But this certainly appears to be a hysteron proteron of the worst kind.

The ordinary historical view must be that *nīdrá* arose after *drā* had combined with *nī* in verbal form; that above all *nīdrá* did not arise and disappear (in favor of *svápnā*?) and then reappear again in a later age. So far, then, as the contents of viii. 48. 14 can show anything, they show that the verse is a late one and awaken suspicion in regard to the whole hymn.

In viii. 59. 14 occurs *itthám*, and only here in the Rik. But it comes up again in AV., SV., Brāh., and Smṛti. Is it not more probable that the verse belongs nearer to the period where it is generally found than that the word has skipped the Rik period to reappear later?

Striking is the correspondence between viii. and ix. in respect of *soma*-epithets—see List vi., above. To what cause is to be attributed the fact that *madacyút(a)* occurs eight times in viii., six times in ix., four times in i., once in x., and in no other passage? Is there congruence here between viii. and the family books or between viii. and the General Books? And its companion *madántara*, *madántama*? It occurs fifteen times in ix.; four times in viii.; once each in i. and x.; both of the latter being late (for the verse i. 91. 17 is later than the venerable hymn in which it is found, and x. 136 is as a whole a late hymn). The word occurs also in AV. xi. 7. 7:

*rājasūyam vājapēyam agnistomās tād adhvarāh
arkāḥvamedhāv úcchiṣṭhe jīvābarhīr madántamaḥ.*

Is one to suppose that *madántama* was known to the poets of the family books, and avoided by them? There are *soma*-epithets enough in these books to make one look there for any expression current in their time. But whoso holds viii. to be older than the other family books must suppose viii. and ix. to have been unknown to the authors of the former set, or that they purposely avoided the choice epithet handed down to them. And either assumption is improbable.

FINAL NOTE.

In the lists given above I have here and there given a bracketed word the occurrence of which was found to be not quite exclusively in the General Books and viii.; and have called attention to the fact that the exception, where the word was actually found in a family book, was often itself in a late verse, so that it would form no real exception from an historical point of view.

There are quite a number of such cases, and some of them I have reserved for this Final Note. There are others, however, which do not, indeed, show the late stamp in the exceptions; but yet these exceptions are enough to raise an interest in the character and history of the word. Thus, neither v. 33. 6 nor vi. 20. 10 is to be marked as late; yet both verses occur in hymns of the same character, two *tristubh* hymns to Indra, each more or less obviously "entstellt," as Grassmann says of both. The first of

these verses contains *vīśavāna*, a word that occurs in i., viii., and x., but not elsewhere in family books; the second contains *pūrah cārādīh*, an expression found elsewhere only in i., and mentions Purukutsa, who is known only to i., and to the late *dānastuti* of iv. 42 ("strife between Varuṇa and Indra"), if *purukūtsāni*, ib., imply the same person. Now this is not enough to show that these verses are late, but it is enough to make interesting the fact that they are the only places in the Rik-Veda where *pra stu* occurs in the family books. For *pra stu* is a very important word in a liturgical sense; and it is one of the commonest of words in late literature, being current as early as the Brāhmaṇas. Looking back, it is found five times in the Atharvan (apart from one Rik example); then, in x. 67. 3 of the Rik, and in x. 105. 6; both of them late among the late. And further, in i. 154. 2 and i. 159. 1, the former of which, by the way, seems to be an echo of x. 180. 2 (or perhaps is borrowed). Then *prastuti* occurs in i. 153. 2, to rise to light again in the Upanishads. All these hymns, it will be noticed, belong to the same Dīrghatamas collection. Then *pra stu* occurs four times more, viii. 16. 1; 22. 6; 35. 11; 70. 5; and nowhere else in the Rik. Whether this sudden concentration of *pra stu* in viii. be the result of the *prastotar*'s added importance, or whether it be a new word working its way into literature, the result is interesting. It occurs in viii. and AV. about the same number of times. It does not occur at all in four out of the six remaining family books; it does occur in two late hymns of the late tenth book, and in the Dīrghatamas hymns of the first (whose Epic name stands in RV. only in i. and viii.).* Whatever age is assigned to the two hymns of the family books where *pra stu* occurs, the marked difference between this twofold occurrence in six family books as against double that number in viii. alone, and the agreement of the latter with the General Books and later usage is noteworthy. That the same combination occurs in Avestan *fra stu*, which might have been separately developed, leads to the question in how many other instances viii. with the General Books and post-Rik literature agrees with Avestan as against the early family books.

Some of these are noticed below. At present I will discuss only one, *kṣīrā*. In regard to the connection between viii. and ix., it would appear, from this word, that the former book were just later than the latter. To trace *kṣīrā* back: In the Smṛti and Brāhmaṇas it is a common word; in AV. it occurs more than a dozen times, alone and in composition, besides *kṣīrīn*, and *kṣīrāvānt*. In short, up to the time of RV. it is used freely. But in RV. it occurs only as follows: once in the tenth book (where the demon that lifts milk from the cow is to have his head cut off by Agni) x. 87. 16=AV. viii. 3. 15; twice in the first book, i. 104. 3; 164. 7; once in the ninth, ix. 67. 32; and twice in the eighth, viii. 2. 9; 66. 10 (*kṣīrapākā*), where too occurs *odanā*, also a late

* But Māmateyā in iv. 4. 13.

word.* Now the contact with ix. is here wholly on the surface. The verse where the word occurs is the last of the hymn, in reference to which with its fellow (the penultimate verse) Grassmann says: "Added by a later hand and refers to the whole collection; found again in SV. increased by four verses." And the benedictive character of the verse supports this view ("who reads these hymns gets milk and honey," etc.).

In this instance the end of ix. is in touch with viii.; and viii. joins the later Avesta to post-Rik literature and the other General Books. The word, with misplaced accent, is related to *ksar*† as is *tira* to *tar*; withal not in Rik but in Epic application. Compare Epic *tathā ksirān ksirantya etāh (gāvaḥ)*; cited with other illustrations by PW. Significant, however, is the fact that *ksar*, though often employed in RV., is not there used of milk. In ii.-vii., *pāyaḥ*, *gāvaḥ*, etc., do duty for 'milk.' But *gō* remains, of course, as equivalent throughout the Rik. While the *gō* compounds predominate in the later group,‡ the mixture called 'sour-milk mixture,' *dādhyāgīr*, does not occur in viii. at all (*dadhān* itself, only in viii. 2. 9), whereas the sweetening of the *soma* is a pronounced feature of this book: *svādanti gāvaḥ*, ix. 62. 5; *gōbhīḥ svādām akarma grīnāntaḥ*; *gavyā vāstreva vāsāyantaḥ*, viii. 2. 3; 1. 17 (compare i. 135. 2; ix. 8. 5; 75. 5, etc.).§ The root *ksar* is used chiefly of *soma*, as in ix. 85. 5: *gōbhīr ayyase*. . . . *īndrasya jathāre sām akṣaraḥ*; viii. 13. 4: *iyām ta īndra rālīḥ kṣarati sunvatāḥ*; sometimes of rivers, as in i. 72. 10. A good example of the way it is not used of milk is furnished by i. 90. 6 and 8: *mādhvī kṣaranti śindhavaḥ*. . . *mādhvīr gāvo bhavantu naḥ*. In the Vāḥhilya it is used of prayers (i. 6; 2. 4). In the family books it is used four times, once of a ship, twice of rivers, and once in a sense not obvious (v. 66. 5); never here of *soma* (as in viii. and ix.).

An excellent example of words that occur in viii. and the General Books, barring one exception in other family books, is *jāūtra*. This is especially interesting because it is such a thoroughly Epic word, almost colloquial in this and subsequent literature. In RV., it occurs in viii. 15. 3, 13; i. 102. 3, 5; 111. 3; ix. 106. 2; 111. 3; x. 36. 10; 103. 5; and also in iii. 31. 4. But just this hymn, iii. 31, has been very properly relegated by Grassmann to the hymns the style of which seems to show a late and mystical (Brahmanical) date. Some may claim that iii. 31 has

* As also *varāhā* (see below). The verse reads *viçvāt tā viçnur ābharad urukramās tveçitaḥ çatām mahiṣān kṣirapākām odandām varāhām īndra emuṣām*. The metre of this, the penultimate, as of the ultimate stanza, differs from that of the preceding; and *emuṣām* is a late form (Lanman, loc. cit., p. 511).

† Compare *gal*, 'drop,' and *yāla*.

‡ *gōmant* (*sōma*, *sutā*), viii. 3. 1; 13. 14; 71. 6; 81. 30; 83. 6; ix. 33. 2 (107. 9 ?); *gōçrita*, viii. 21. 5; i. 137. 1; *gōpariṇa*, viii. 45. 24; x. 62. 10; *gōsakhi*, v. 87. 4, but in viii. 14. 1 *gōsakhiḥ syāt (stotā me)*; in the family books, further, *gōçjika* (iii. 58. 4; vi. 23. 7; vii. 21. 1).

§ Compare Hillebrandt, loc. cit.

as good a right to its place as any, but they can scarcely deny the particularly mystic character of the production, which sets it on a par with the hymns of like sort in the General Books.* It is, therefore, not unimportant, to say the least, that in just such a hymn of the family books, and in no other, should be found a word used in viii. i. x., AV., Brāh., and particularly in (Epic) Sanskrit—in short, a word peculiarly post-Vedic in its province.

Curious is it to find two exceptions of this sort, both auspicious. Such is the case in the *āriṣṭa* compounds. In AV. are found two compounds not in RV., viz., *āriṣṭagu* and *āriṣṭāsu*. In AV., and in RV. x. 60. 8; 97. 7; 137. 4 appears *āriṣṭātātī*, with the compound *āriṣṭarathu* in x. 6. 3. In i. 166. 6 is found *āriṣṭagrāma*; in i. 114. 3, *āriṣṭavira* (also in AV.); in viii. 18. 4, *āriṣṭabharmān*, voc.; in i. 89. 6; 180. 10; x. 178. 1; iii. 53. 17, *āriṣṭanemi* (later as n. prop.); in v. 44. 3, *āriṣṭagātu*. Now there is every reason for regarding v. 44 as a late hymn; and iii. 53. 17 is apparently the beginning of an after-hymn added to the original, and presumably later. These, however, are the only cases of *āriṣṭa* compounds in the family books.

Again: the hymn vi. 47 has rightly been regarded as late. Here, vs. 26, occurs *vidvāngu*, a compound that is found elsewhere only in viii. 74. 7 and i. 118. 9.†

Another interesting word is the compound *svdhākṛta*, or *svdhākṛti*. It is a common combination in either form in the Brahmanic period, and the former is found in AV. In the Rig-Veda both forms are found in the group i., ix., x., but in the family books there is only *svdhākṛta*, and this is confined to viii. 35. 24 and ii. 3. 11. At this verse in viii. it would, therefore, be in order to place the note: 'not known elsewhere in the period of the family books save at ii. 3. 11;' and, if nothing of especial significance appeared to except the exception, to let it stand at that. But on minuter examination it is seen, first, that viii. 35. 24 is the only case where the form is used apart from Āpī hymns, except in the one instance, i. 110. 1 (a Kutsa hymn to the Maruts). How stands the case, then, with the Āpī verse, ii. 3. 11, which makes the exception? It runs as follows:

* This view of iii. 31 is supported by Lanman, *loc. cit.*, p. 493.

† Words compounded with the ending *çās* offer a curious study, though the cases in the early books preclude the use of them in argument. But the facts may be worth presenting. There are no less than ten such words. The only cases which occur in family books (other than viii.) are in the probably late verse ii. 38. 8 (*sthāçās*); in the late hymn (to the sacrificial post) iii. 8. 9 (*çreviçās*; also in i. 163. 10); in iii. 21. 5, of very modern tone (*devaçās*); and in vi. 52. 12 (*vayunaçās*). On the other hand, *ṛtuçās* occurs only in i. 162. 4; x. 2. 5; 55. 3; 98. 11; AV.; *dhāmaçās* and *rūpaçās* occur only in i. 164. 15; *parvaçās*, only in viii. 6. 13; 7. 22, 23; i. 57. 6; x. 79. 6; *manmaçās*, only in viii. 15. 12; and *sahasraçās*, so common in the Epic, only in viii. 34. 15. The root, if it be *ças*, is found in i. 162. 18; iv. 37. 8, as verb; i. 163. 12; x. 89. 14; 85. 35; and i. 162. 5, 19, 20, as noun.

*ghṛtām mimikṣe ghṛtām asya yónir
ghṛtē grītō ghṛtām v asya dhāna
anusvadhām ā vaha mādāyasva
svāhākṛtām vṛṣabha vakṣi havyām.*

But the ancient Āprī ending runs as follows: *svāhū* (*devā amṛtā mādayantām*), which is found not only in the oldest Āprī, vii. 2. 11 (compare *āsura* of Agni in verse 3), but also in iii. 4. 11, and (the whole phrase) in x. 70. 11. Further, the only other instance of Āprī in family books, v. 5. 11, also has the *svāhā* alone (*svāhāgnāye*, etc.). On the other hand, in the General Books the formula, save where the whole old formula is preserved intact (in x. 70. 11), contains *svāhākṛti* or *svāhākṛta* in the parallel verse of their Āprī hymns. Thus *svāhākṛtāny ā gāhy āpa havyāni vītāye*, i. 142. 13; *svāhākṛtīṣu rocāte*, i. 188. 11; *svāhākṛtim pāvamānasyā gata* (imitation of Āprī in majorem gloriam *Somasya*), ix. 5. 11; *svāhākṛtām havir adantu devāḥ*, x. 110. 11.*

Not to animadvert upon the *fade* repetition of *ghṛtām* in ii. 3. 11, the *svāhākṛta* formula, therefore, is unique in the Āprī hymns of family books. The facts may thus be stated: Apart from ii. 3. 11, there are two closing Āprī formulas, one with *svāhā*, and one with *svāhākṛta* or *svāhākṛti*, with an intermediate *svāhā kṛ*. The first alone is employed in Āprī hymns of the family books; the second contains a word common to i., ix., x., and the Brahmanic period, but it is not used at all in the family books ii.-vii., either in Āprī hymns or elsewhere—except for ii. 3. 11. This passage of the second book stands, therefore, on a par with i., ix., x., and Brāhmaṇas rather than with the family books. In consequence, ii. 3. 11 is not really an important exception to the statement that (*svāhākṛti*) *svāhākṛta* standing in viii. 35. 24 indicates that the hymn or verse belongs rather to the period represented by Brāhmaṇas than to that of the family books. If, on the other hand, it is assumed that viii. 35. 24, which is not in an Āprī hymn, is early, instances of the phraseology should be found in other (assumedly contemporaneous or later) family books apart from Āprī hymns, as is the case with *svāhā* itself. And if it is said that it makes no difference whether ii. 3. 11 is an Āprī verse, and that it is itself early, then the question why the Āprī formula has passed the family books to reappear in i., ix., x., remains unanswered. So, for my own part, I should not hesitate to put *svāhākṛta* in the list, viii., i., ix., x., as belonging to this group, despite the exception.

The word *nīstya* (viii. 1. 13; x. 133. 5; vi. 75. 19) might thus be referred to its AV. (and later) period; for vi. 75 is the late hymn to weapons.

* In i. 13. 12 the intermediate form is preserved in this position (last verse of Āprī), *svāhā yajñām kṛnotanēndrāya*, as in i. 142. 12; x. 2. 2 (not Āprī). The verb need not, but may, be understood in v. 5. 11, above.

Interesting is *kakṣya*, -ā. It occurs in the compound *kakṣia-prā*, at viii. 3. 22; i. 10. 3; and uncompounded, in the Epic quite often;* in RV. i. and x.; and also in the family books,—but there, only in two apparently late passages, vii. 104. 6; v. 44. 11.

Somewhat similar is the case of *tuviṅgrīva*. It occurs at viii. 17. 8; 53. 7; i. 187. 5; and v. 2. 12. But v. 2 ends with vs. 11, and 12 is a late addition.

Similarly *śaiṣama*, an epithet of doubtful origin and applied only to Indra. It occurs: i. 61. 1; viii. 32. 26; 51. 6; 57. 6; 79. 1; 81. 9; x. 22. 2; and finally, vi. 46. 4. It might therefore be classed with the words of the period of i., viii., x., were it not for the last-named occurrence. But vi. 46, as appears from its position in the collection (see Grassmann, *ad locum*; Lanman, *loc. cit.*, p. 578), is late. After all, then, the old books do not really support any claim of age for the word; the seeming exception "proves the rule."

So *parṇin*, in the Epic 'a tree,' approaches that meaning at ix. 82. 3. In the sense of 'winged,' it is found in viii. 1. 11; 5. 33; and nowhere else in RV., save in vs. 11 of the late vi. 46, just mentioned.

Again, there are two sorts of *eva* compounds. One, from *éva*, may be claimed for the family books. As representatives of the other, *evá*, there is *evāra*, viii. 45. 38, and *evāvadā*, v. 44. 10. But *evāra* has for its make-up no real support in the family books, for just this hymn, v. 44, is late (Lanman, *loc. cit.*, p. 581).

So *sūpūrṇa*, in use after RV., occurs in RV. vi. 48. 18; viii. 2. 1, 8. But the first verse is a late addition.

Less certain is *turá*, 'swift,' which occurs in vii. 86. 4, a hymn that will probably be claimed as old despite the modern tone conveyed by the 'ancestral' or inherited sin. Otherwise the adjective occurs only in i. 68. 9; viii. 26. 4 (according to Grassmann in other passages of this book also); x. 49. 11; AV., and later. But the related *turvāne* is a case in point. It occurs in viii. 9. 13; 12. 19; 45. 27; x. 93. 10; vi. 46. 8; and the last hymn (above) is a modern one.

A very good example is furnished by *citiprsthá* in viii. 1. 25. In the later literature *citi* compounds are very familiar. In RV. there are, however, but two such compounds, *citipád* in i. 35. 5 (*Kāṇva*), and *citiprsthá* in viii. 1. 25; iii. 7. 1. The latter is a notoriously late hymn. The word itself is common after RV., in Brahmanic literature. The passage in viii. goes with the late iii. 7 in giving it its sole support. Is one of these thus early and the other later, with no examples between? Rather are they both late, and approximate to the period where flourish the *citi* words.

Such judgment as may be passed upon these must also hold in the rarer cases where a word is not proved to belong to a later

* Meaning 'girdle' (so in *hastikakṣyā*) as well as 'wall.' The meaning '*antargṛha*,' by the way, is not unknown to Mbhā.: thus, xii. 326. 81, *kakṣyā tṛtīyā rājaveçmanah*.

period, if in itself it shows a later tendency of meaning; such as *vená* as compared with Avestan *vaena*. In RV., the general sense of 'movement toward' is still felt in the verb, which also, however, has attained to the sense of 'love.*' But the adjective substantive *vená* (*suvená*, *vená*) is a product of the period i., viii., ix., x. For it occurs not infrequently, some eighteen times, yet never outside of this circle save in iv. 58. 4, which may be referred without discussion to the latest of the late. Like *venyí* it becomes a proper noun, and as such loses its adjectival character; though it is still found in AV.

There may even be cases where an example in a family book is still unable, though it is unsuspected and unimpeachable, to offset the unique appearance of a late word in viii. Who, for instance, can really believe that viii. 45. 23 actually belongs to the older part of the Rig-Veda? In iv. 7. 3 stands *haskartár*, and so it may be said that *has* has a certain antiquity. But the root is else unknown in the family books. It crops out again in i. 124. 7 (*hasrá*); in ix. 112. 4 (*hasaná*); in x. 18. 3 (*hása*); and three times in Kāṇva hymns, once, in i. 23. 12 (*haskārā*), and twice in viii., *haskṛtī*, 78. 6, and *upahāsavan*, 45. 23. They are all lone forms. But when we consider the Epic character of *upa has*, and the fact that before the latest Brahmanic period (*upahāsá* in Čat. Br. xiv.) not one other case of the combination is cited, it becomes impossible to believe that *upa has* has skipped from the early Vedic period almost into the Epic (where it flourishes like a weed) without leaving a trace. The root itself in other combinations, as shown above, is barely represented in the family books of the Rik. This Epic combination is known only in this verse (repeated in AV. xx.). The only reasonable way to state the case is that *upahāsavan* belongs to the end of the Rik period, not to the early period. There is mockery enough in the RV. to have brought the word into use, if it had been current then as it is in the Epic.

Under the head of stylistic peculiarities should be ranged the introduction into Vedic poetry of *viṣvācandra*, as embodying more emphatic laudation than the *puruścandrā* of the old family books. This weightier *viṣvācandra* occurs only in i. 165. 8; viii. 70. 9; ix. 93. 5; x. 134. 3; and also in the late hymn (Lanman, *loc. cit.*, p. 457), iii. 31. 16.

Under the same category belongs the pronounced preference in viii. and the General Books for superlatives and comparatives, a preference which doubtless is to be explained by the later taste. Thus: *ádācūstara*, *abhibhātara*, *agvadātara*, *uruvyācātama*, *ojodātama*, *gātuvittama*, *códiṣṭha*, *jāstātara*, *maksātama*, *madhupātama*, *varivovittara*, *vēdiṣṭha*, *śicivratatama*, *sacānastamā* (PW.), *sāniṣṭha*, *sukṛttara*, *supśarastama*. Not one of these occurs in the group ii.-vii.; but every one of them is found in viii. alone or in viii. and the group i., ix., x. I may add from the Vāḷakhilya, *pārbbhittama*, 5. 1, and *maghavattama*, voc.,

* Compare "inclination," in the sense 'affection, love' (Beattie).

6. 5; while a Kūṇva effusion in i. 42. 6 furnishes the mushy superlative *hiraṇyavāgīmattama*, fitly invented for Pūṣan. A good example of what a tasteless late poet will do in the way of heaping up laudation is given by viii. 81, where *sāniṣṭha*, *dyumnī-tama*, *citrāgravastama*, *vrātrahāntama*, and *ojodātama* occur in the space of three verses (15-17).*

The word *hiraṇyāya* is found about sixty times in all. Quite a third of the occurrences are in the General Books, i., ix., x.; another third is distributed over all the other family books; while viii. alone has another third. This constant repetition of 'golden' is on a par with the superlative use of superlatives, and betrays a late taste pleased with too much gilding.

A stylistic peculiarity, again, is the affectation of such alliteration as *gikṣā śacivah śacibhiḥ*, found only in viii., i., x.; while perhaps in the alteration of *mahān mahābhir ūtibhiḥ*, of the other family books, to the twice repeated *mahān mahābhiḥ śacibhiḥ* of viii. there lies nothing but a wish to strengthen the expression.

It may indeed well happen that a genuinely old word should occur only in viii. and the General Books. But compared with the lists of words common at once to this group and the following literature, such words are few. Perhaps *aydsya* is ἀΐδης (List vi.); and *ari-* in *aristutā*, etc., may be the ἀρι- or ἔρι- of ἀρίζηλος, ἐρίκλυτος. But, again, this may not be the case. Nor are *udāra* and *uterus* (IF. ii. 15) to be equated with certainty. And *kṣurā*, though phonetically equivalent to *ξυρόν*, is not the same thing, but rather a developed 'blade,' for chariots, etc.† With *χαράδριος* has been equated *hāridravā* (viii. 35. 7; i. 50. 12), but the case does not seem to be important. So *himā* chances to occur only viii. 32. 26; 62. 3; i. 116. 8; 119. 6 (x. 37. 10; 68. 10); *himāvant*, x. 121. 4. But *himā* is found in the family books, so that this too is unimportant. As for *hyās*, which occurs only in viii. 55. 7; 88. 1; x. 55. 5, it is *χθές*, but as the latter does not occur till after Homer, so the word is not needed by the Vedic poets, and its absence in ii.-vii. has no especial weight. I have noticed no other examples like these.

Words with Avestan cognates.—In regard to such words in the above lists as show Avestan relationship, there is more to be said and considered. If Grassmann's assumption that *ātha* is a late form of *ādha* were correct, then the facts about these words,

* Some of these are noteworthy as illustrating the style and age of viii. Thus *vrātrahāntama* occurs once in vi. (at 16. 48); once in vii. (at 94. 11); twice in v. (at 40. 1; and 35. 6=viii. 6. 37); but twelve times in viii. So *dyumnī(n)tama* and its positive occur eighteen times, but only in i., viii., ix., and x., barring a single instance at vs. 8 of iii. 37, a hymn with divers marks of lateness.

† In viii. 4. 16, *bhūrījor iva* (as in AV. xx. 127. 4), not the sharpness but the speed is the thought. So *sāhçita* is 'active,' as in AV. xii. 1. 21, *tvīṣimantaṁ sāhçitam mā kṛnotu*; and 'activity' is the general notion conveyed by *bhūrīj*, as in ix. 26. 4 (*dhyān*). Here, as said above, p. 61, it is not a pair of scissors, but an axle-blade rapidly moving, that gives the comparison.

so far as they go, would make against the view that viii. is not early; for in viii. there are 27 occurrences of *ādha* to about half as many of *ātha*. But both forms are used in x.; and both *atha* and *adha* are Avestan. Probably one is as old as the other.* But in running over the foregoing lists, the reader will doubtless have noticed quite a number of other words of Avestan belongings: such are *udāra*, *ūstra*, *evāthā*, *gāthā*, *jāmātar*, *takvā*, *tanū-kēt*, *mešā*, *varāhā*, and one or two more. In the RV., all of these are confined to viii. alone, or else to the group, viii., i., ix., x.

Now if these words were found in the Avesta and viii. alone with some of the hymns of the General Books, the solution of the puzzle here presented would be easy. To disregard the affinities of viii. with the later literature; to say that these words, which are so uniquely preserved in viii. and appear again later on, are mere play of chance; to point to the list of words common to the Avesta and viii. with its group, and say that here is proof positive that there is closer relationship with the Avesta, and that, therefore, viii. after all is older than the books which have not preserved these words, some of which are of great significance, would be a first thought. But this explanation is barred out by the fact that most of these Avestan words preserved in viii., withal those of the most importance, are common words in the literature posterior to the Rik. Hence to make the aforesaid claim would be tantamount to saying that these words have held their own through the period to which viii. (assuming it to be older than ii.-vii.) is assigned, have thereupon disappeared, and then come into vogue again after the interval to which the maker of this assumption would assign ii.-vii. This, despite all depreciation of negative evidence, is not credible.

Take, for instance, *udāra* or *ūstra* or *mešā*: the first is found only in viii., i., x.; the second in viii., i.; the last, in viii., i., ix., x. Is it probable that words so common both early and late should have passed through an assumedly intermediate period (of ii.-vii.) without leaving a trace? Or, again: is a like assumption credible in the case of *kširā*, which appears in the Iranian *kshīra*; in RV. viii., i., ix., x.; disappears in the assumedly later group ii.-vii.; and reappears in the AV. and later literature as a common word? Evidently, the facts are not explained on the hypothesis that the Avesta and RV. viii. are older than RV. ii.-vii.

We must, I think, suppose either that the Avesta and RV. viii. are younger than RV. ii.-vii.; or else that the poets of viii. were geographically nearer to the Avestan people, and so took from them certain words, which may or may not have been old with their Iranian users, but were not received into the body of Vedic

* Somewhat similar is the case of *baḍā* (viii. 69. 1) as against *bād* of ii.-vii. Avestan *bāf* and *bādha* show the variability of the expletive. The Epic has *bādha*. Compare also RV. x. 86. 23; AV. vii. 56. 7, *bhala* (with *bhadra*, as if cognate); and Alkman, 8(12): βάλε δὲ βάλε κηρύλος εἶπν.

literature until a time posterior to the composition of ii.-vii. Milk, cattle, and the like lay very near to the hearts of the Vedic poets. Had such words as *kṣīrā* or *meṣā* or *āṣṭra* been current in the time or place of the poets of ii.-vii., they would surely be found in those books occasionally, in place of a *pāyas* or an *āvi* or a *mahiṣā*.

In the case of Iranian *kshīra*, Vedic *kṣīrā*, there is found a word common in AV. and later literature, synonyms of which word are used in RV. in ii.-vii., while it is itself not found at all in ii.-vii.; but it is found in a late hymn of x.; in a late verse of ix.; in one apparently added verse of viii.; in another of viii.; and in the Avesta. Shall we represent the chronological advance thus: Avesta, known; RV. viii., known; RV. ii.-vii., unknown;* AV., etc., known and current? Extraordinary, to say the least. But reasonable would be the order: RV. ii.-vii., unknown; Avesta, end of RV. ix., RV. viii., known; AV., etc., current.

The following List contains:

Words common to the Avesta and the RV., but restricted in the RV. to viii. and the group i., ix., x.

evāthā, viii. 24. 15; Avestan, *aēvatha*. The hymn is not marked by unique late words; but the correspondences with i. and x. (see Lists iii. and iv., above) include *nūr̥ti* (as pl.), *paripād* and *dānsiṣṭha*, all lacking in ii.-vii.

udāra, Avestan, *udara*. The Vedic word is found at viii. 1. 23; 2. 1; 17. 8; 67. 7; 80. 5; i. 25. 15; 30. 3; 42. 9; 162. 10; x. 86. 23. Of the hymns in viii., each one is marked by late words of List i., above.†

āṣṭra, Avestan *ushtra*, viii. 5. 37; 6. 48; 46. 22, 31 (all these are *dānustutis*); i. 138. 2. See under *meṣā*, below.

kṣīrā, Iranian *kshīra*. Discussed above, pp. 64, 75. Like *udāra*, *kṣīrā* is found in viii. 2; also in 66. 10, which seems to be an added verse. The Iranian word is also late.

gāldā, viii. 1. 20, may be connected with Avestan *gared*.

gāthā, *gāthā*, Avestan *gāthā*, found in books ii.-vii. but once (in a late hymn); elsewhere in i., ix., x., and in viii. 2. 38; 32. 1; 60. 14; 87. 9. Hymns 60 and 87 are not marked by late words of List i.; nor does 32 (a Kāṇva hymn) contain an important example. See above, p. 65.

* Or unused. But its synonyms are used so often in ii.-vii. as to make it unlikely that it would have been unused if known.

† See above, p. 61. There may be a choice here (*jaṭhāra* occurring only once in viii., and *udāra* never in ii.-vii.), rather than a lack. It is interesting to notice that the Praskaṇva of ix. 95 not only uses the word regularly employed in ii.-vii., but also uses *vāruṇa* in its original sense of water ("Trita holds the water in the sea," ib. 4; cf. 94. 3, for the idea). In general the Kāṇvas of ix. make a more venerable impression than do those of viii. or i.

jāmātār, viii. 2. 20; 26. 21-22; *vī-*, i. 109. 2 (p. 57); Avestan *zāmātār*. From the meaning of this word it might pass without literary employment for a long while, and the example, therefore, does not seem important. Yet it is to be noticed that it also occurs in 2, which has *udāra*, *kširā*, and *gāthā*. Hymn 26 is not marked by words unique in viii. (List i.), nor has it important correspondence with x. and i. *takvā* (*taku*, etc.), viii. 58. 13. Compare Avestan *takhma*, *tuka*. This hymn contains *odanā*, not apparently in an added verse (14), and has correspondence with x. and i.

tanūkrt, viii. 68. 3; i. 31. 9 (*tanūkrtthā*, viii. 75. 1); Avestan, *tanukereta*. The Kāṇva Soma hymn 68 is without very late words, and remarkably free from correspondence with i. and x. The meaning of the Vedic word is one with that of the Avestan, though it is applied in RV. to self-made sin or hurt; in the Avesta, to sons. Compare *putrakrtthā* in v. 61. 3 (late hymn), and x. 63. 15. Above, p. 58.

[*dātra*, viii. 67. 10 (Kāṇva hymn), Persian *dās*; and *naḍā*, viii. 1. 33, *dānastuti*, Persian *narda* (?).]

prābhartar, viii. 2. 35; i. 178. 3. Though this is also in hymn 2, I regard it as purely fortuitous that *prābhartar* corresponds to *frabaretar*, for the latter is a priest; and the compound verb may easily have been developed independently, as in Greek and Latin, whence an independently made nomen agentis.

mešā, Avestan *maēsha*. This word occurs only in viii., i., ix., x. In viii., in the same second Kāṇva hymn (2. 40), and in 86. 12 (ascribed to Rebha Kācyapa). Hymn 86 has scarcely any correspondence with i. and x., and contains very few unique words (of List i.). In 2, the word occurs in a verse introducing a *dānastuti*, but in the interesting form *mešō bhūtō* 'bli yānn āyāḥ'; for here is close touch with the Avestan "incorporate ram" god (*maēshahē kehrpa*), and RV. i. 51. 1 (compared by Justi). This seems to be the case also with 86. 12, which is addressed to "the ram." But, as will be seen by the analysis above on p. 66, *mešā*, *mešt* is also the sheep as provider of the wool-sieve, and as a sacrificial beast. In iv. 2. 5 occurs the only early reference to the sacrifice of sheep* (*āvi*); and it is only in viii. 86. 2 that the forray gives sheep (*āvayayam bhāgam*). In the *dānastutis* there is but a single instance where sheep are given, and that is in Vāl. 8. 3, *ārnāvalinām*, one hundred (along with one hundred asses and slaves). This can scarcely be because the gift of sheep was forbidden at this time, for in that case they would not have been given and publicly receipted for.† There seems,

* Perhaps "the sacrifice which has sheep" means rather "wins sheep."

† Compare also *vṛṣṇī*, 'ram,' only in i. 10; *ūrā*, only in viii. and x. Cases of *mešā* other than in divine work are i. 43. 6 (Kāṇva hymn), where there is a rare blessing on sheep and horses. Doubtful allegory rules in x. 27. 17. In x. 91. 14 there occurs one of the four instances of sacrificial rams (also i. 116 and 117 and iv. 2. 5, the last questionable, as above). I forget who has suggested that sheep were forbidden.

indeed, to be a striking coincidence here between the occurrences of *ústra* and of *mesá*, which cannot be accounted for on any accepted historical ground. It is assumed by most scholars that *ústra* generally means a camel in the Brāhmaṇas, a bull in the R̥g-Veda, and a camel again in the Avesta. But camels as wagon-haulers cannot have been unknown, since even in Manu the 'camel-wagon' is spoken of (*ustra-yāna*), and in the Epic people journey on *rathāir ustrayujāh*, Mbhā. xvi. 7. 33, so that the passage which speaks of 'four-yoked' *ústra** may be taken to mean camels (not 'with four yokes' but four harnessed together), since it was no uncommon thing to have four horses or even eight to a team, and if camels were used for draught at all it was easy enough to harness four together. The only weighty passage that has been thought to indicate cattle instead of camels is i. 138. 2. Here the sole reason given is that to compare Pūṣan in his fury to a bull is more reasonable than to compare him to a camel. But a male camel is a most vicious and dangerous beast when he gets angry, and the objection has no more force than the still weaker one that in viii. 46. 31 *krad* is used to describe the noise of this *ústra*, a verb that is applied to horses as well as to bulls, and in fact to a variety of noisy things. Against these weak reasons I would set the historical improbability of *ústra* being used either indifferently for camel or for bull, or for camel first, then for bull, and then again for camel. The humped steer is known as such, *kakūdmān vṛṣabhaḥ* (in x.); *kakūbhaḥ (gávām)*, viii. 20. 21; *kakuhó mṛgāḥ*, v. 75. 4, etc. Buffaloes, and wild kine, under the name of *mahiṣá*, *gavayá*, *gaurá*, are also known to the family books. They serve as beef and give milk. But not a word of *ústra* till i. and viii.†

yahú, Avestan *yazu*. This word occurs in vii. 15. 11; but this is a late hymn, and it is the only passage in ii.-vii. where the word occurs. Elsewhere it is found in viii. 4. 5; 19. 12; 49. 13; 73. 5; i. 26. 10; 74. 5; 79. 4. Excepting 73, all

* *ústrān caturyojo dadat*, viii. 6. 48. In Āit. Br. ii. 8, where PW. thinks a bull is meant, the animal is distinguished from *gavayá* and *gauramṛgá*, but that is no conclusive reason for taking it to be a bull.

† Apropos of *mesá*, it may be noticed how very rare is in any case the mention of sheep in the family books. The animal was known of course, but evidently not much attention was paid to it. The words for wool and weave do not necessarily imply sheep, as goats' hair was woven, and *āpā*, wool, means only covering. The *āvi* (ovis, etc.) is mentioned but twice in the family books, ii. 36. 1 (*soma* passes through 'sheep' and several stones), and iv. 2. 5: *gómān agné 'vimān aṇvī yajñāh*. In the eighth book alone sheep, as *āvi* and *mesá* (the latter not in family books), are mentioned four times (see above). On the weaving of goats' hair see Geiger, *Ostiran. Kultur*, p. 224, note. It would seem, from i. 126. 7, that sheep-raising was especially successful to the west of the Indus (in Kandahar), which (see below) may account for the greater familiarity of the Kāpvas with this branch of farming.

these hymns of viii. contain late words, and correspondences with i., x. But after all, the equating of *yazu* with *yuhá* is not phonetically certain.

rajatá, Avestan *erezetu* (?), viii. 25. 22 (ascribed to a Vāiyagva).

The hymn is very free of late words and correspondence with i., x. The word occurs in a *dānastuti*.

varāhú, Avestan, *varāza*, viii. 66. 10 (Kāṇva hymn), and i., ix., x.

The verse is late. See above, under *mešá*, p. 66.

vāku in *adhināku*, etc., List i., above. The Avestan correspond-

ence, *fravāku*, is only with the Brahmanic *pravāku* probably specially developed, as in the case of *frabaretar*, above.

vṛṣṇí, Avestan, *varshni*, 'ram,' is mentioned only in i. 10. 2. In viii. 6. 6, the word is an adjective with the same meaning as *vṛṣṇí*. i. 10 is probably a Kāṇva hymn.

gvātrá, identified with *qāstra* by PW., occurs viii. 4. 9; 52. 5; i. 31. 4; x. 88. 4.

stu in *prá stu* and *prāti stu*, Avestan *fra stu* and *paitistavus*.

These, too, may have developed independently. But, on the other hand, there may be as close a relation between the Avestan and the Vedic words as there is in the case of *Trita Āptya*, who, as such, appears in RV. only in viii. 12. 16; 47. 13 ff.; i. 105. 9; x. 8. 8; but never in ii.-vii.*

hīranyapegas, viii. 8. 2; 31. 8; Avestan *zuranyopaēsa*.

To a certain extent the contradiction between the result tentatively arrived at in the body of this article and that which naturally appears necessary in view of this Avestan agreement, may be obviated by the assumption that the hymns marked by the latter constitute the older part of the Kāṇva collection. But this answers for only a portion of the cases, notably not for *dānastutis*; and does not seem to be a very satisfactory solution, since their character and their place in the collection mark many of these hymns as later than others of the same book. This topic can be better and more fully treated after a still closer study of the relations of the other books to the eighth.

Indications of a difference between RV. viii. and RV. ii.-vii., in respect of time or habitat.

I have spoken above of the rarity of sheep in ii.-vii., and the comparatively frequent allusions in viii. The similes bear out the difference. The 'lamb-shaker,' as a descriptive name of the wolf (55. 8), is paralleled by the passage in 34.3, *úrām ná dhānute vṛkah*. It is significant that these two passages occur in viii., and that there is nothing like them in ii.-vii.

Moreover, there is not a single reference in ii.-vii., apart from

* The nearest approach is, as often, in v. (41. 9), where *Āptya* appears (without *Trita*). For *stu* in compounds see List i. and this Note, *ad init*.

one clearly late hymn,* to ploughing, or to any of the paraphernalia of agriculture. On the other hand, there are ten such references in the other books, and of these viii. has its share, two passages alluding to ploughing.† In one of these, *yávan vřkenā karṣathā*, viii. 22. 6, the RV. stands verbally in touch with the Avesta, withal in the only formula of agriculture that is common to the two; for in other particulars than *yao kareš* the agricultural words of the Avesta are not paralleled in RV.‡ Conversely, this *yávan karṣ* occurs in RV. only in i. 23. 15 (Kāṇva hymn); 176. 2 (repeated phrase); viii. 22. 6. The Atharvan has at least two valuable passages on agriculture. In one of these it states that agriculture is entrusted to the Agvins (x. 6. 12), possibly with the notion that so new gods properly guarded an art so new (for the Agvins are perpetually reminded that they are not equal in divine dignity to the other gods); and in the other it mentions that agriculture was invented by Pṛthī Vāinya. The interesting fact here is that this Pṛthī Vāinya is mentioned in RV. only in the eighth book.§

But I do not intend to go so far afield as to argue that ploughing was unknown to the early Vedic people. It is sufficient for my purpose to have shown that all allusions to it are lacking till a late hymn in other family books; and that, on the other hand, just as in RV. the eighth book alone has the Avestan word for sheep and speaks of sheep more familiarly than do the other family books; just as it alone of the family books (apart from the late hymn v. 44) has the Avestan word *gāthā*; so it differs from the other family books and agrees with the General Books in its allusions to agricultural life.|| It is interesting to note that

* This late hymn, iv. 57, is specially marked as such by its use of *sāmā* for year, elsewhere found only in x.

† i. 23. 15; 117. 7, 21; 140. 4; 176. 2; viii. 20. 19; 22. 6; x. 34. 13; 101. 3-4; 117. 7; 146. 6.

‡ In the Avesta, *aiwi-varez*, to plough, and *cufra*, the plough, have no Vedic representatives; and *yao kareš*, as stated above, is paralleled in RV. only in i., viii., x. That *kārsman* means furrow (in RV. i. and ix.) is far from certain. It is merely the line drawn. This sense of *karṣ* is certainly the more primitive, and it is shown in the Avestan *dānōkarsha*, not 'corn-ploughing' but 'dragging corn'; as well as in *karshōrāza*, 'making a collection' (draught) of people. It is, therefore, by no means certain that *kṛṣṭi* means a ploughing people. Like *incola*, it may revert to movement simply. In RV., *karṣ* is used of a water-bag (*dṛtiṣ sū karṣa*, v. 83. 7), of a foot, and of Indra's body (x. 28. 10-11; 119. 11); in all of which cases 'drag' is the meaning. That raising *yáva* does not imply ploughing has long been recognized (Hehn; and Schrader, p. 412). In RV. the only grain mentioned is *yáva*. Not till AV. are beans and rice alluded to. The Vedic people lived on pumpkins (*urvārukā*), wild fruit, *yáva*, meat, game, and intoxicating liquors.

§ Compare RV. viii. 9. 10; AV. viii. 10. 24: *tām pṛthī vāinyō 'dhok tān kṛṣm ca sasyām cā 'dhok*. The passage of AV. is referred to by Zimmer, ALL., p. 235.

|| Not unimportant is the little circumstance that the only passages in RV. where the poets beg for (*dāvāvad gōmad*) *yāvamāt* are viii. 82. 3; ix. 69. 8; x. 42. 7; 131. 2; while *yavayū* occurs only in viii. 67. 9.

the same difference, in degree at least, obtains between the Iranian Gāthās and the Vendidad, the agricultural life barely represented in the former being conspicuous in the latter.*

Some special contact with Iran may be inferred from these facts; and perhaps in this lies the explanation of the further fact that 'Seven Rivers,' the Iranian name for India, is mentioned only in the eighth book; that in two of the three passages where the 'Five Peoples' are mentioned in viii. the poet speaks as if they were at a distance; that the geography of viii. takes us plainly across the Indus to the West more often than to the Pusi-

* Compare Geiger, *Ostiran. Kultur*, p. 403 ff. It is perhaps proper to specify in what particulars the agricultural words are found in the latter part of RV. and not in the earlier part. The late hymn, iv. 57, mentioned above, contains the words for plough, ploughman, and furrow. Elsewhere: the threshing floor, *khāla*, is mentioned only in x. 48. 7; *vfka*, plough, only in i. 117. 21, viii. 22. 6; *lāṅgala*, plough, in iv. 57. 4; *sīrā*, plough, only in the same late hymn and x. 101. 3-4; *pāviraavant*, of the plough, only in post-Rik literature; *phāla*, ploughshare, only in iv. 57. 8; x. 117. 7; *vāhā*, the beast that drags the plough, only in iv. 57. 4, 8; *kṛṣī*, agriculture, only in x. 34. 13; 146. 6 (*ākṛṣīvala*); *kināḍa*, ploughman, only in iv. 57. 8; *sītā*, furrow, only in iv. 57. 6-7; i. 140. 4. It is generally assumed that ploughing was an Indo-European accomplishment; but the facts are that *ἀροτρον* and *arare* have only Celtic, Slavic, Teutonic representatives; and other farm-words, such as harrow and sickle, show no Indo-Iranian kinship. The old connection of *urvdā* and *aroupa* is now discarded, and the equation *hirse*, *kary* is admitted to be a guess (Schrader, pp. 410, 411, 424). In truth, the assumption, as a historical fact, rests only on the equations *τέλσον*, *karyā*, *kāryaman*; *εὐλάκα*, *vfka*; and *λαῖον*, *lavi*, *lavaka*, *lavāyaka*. In the last group, *λαῖον* means first grain cut, then the cutter; so, not to speak of the fact that all the Sanskrit words are preposterously late, it is evidently the root only and not the developed words which may be compared, and this robs the words of all value. The negative *arykā* shows in RV. so plainly that *vfka* is still a mere adjective noun, that it is quite uncertain whether the 'piercer' is not an independently developed noun in *vfka* and *εὐλάκα*; just as in Avestan, *cuṣra* comes from *ciṣ*, 'piercer.' Finally *τέλσον* is like *kāryaman* (see above) in this, that it is the line drawn, and by no means the furrow of the ploughed land, but the limit, the line beyond the furrows (implied in *aroupa*). It is noteworthy also that in RV. the word for sickle, *srqi*, occurs only in i. and x., except for iv. 20. 5, and in this last passage it is quite impossible to render it 'sickle,' but it must be the conqueror's hook (i. 58. 4; x. 101. 3; 106. 6; in iv. 20. 5, *srqyo nā jētā* may be, as PW. suggests, a late adaptation of i. 66. 3; but the words can mean only 'victor with hook,' as in *āṅkin* and *dīrghās te astu āṅkuḍāḥ*, viii. 17. 10; *dīrghān hy āṅkuḍān yathā*, etc., x. 134. 6). If it is the gambler's hook, to rake in winnings (ii. 12. 4, 5; viii. 45. 38; AV. iv. 16. 5), the word *jētā* is used in a very late sense. On the other hand, the word for sickle which is in touch with post-Rik literature (for *srqi* is not long preserved in that meaning) is *dātra* (Persian *dās*), and this is found only in viii. 67. 10, till Sūtra and Epic (compare x. 131. 2). The modern wild tribes of India as well as the Indian tribes in U. S. show that mere scratching is for ages the only ploughing, and is all that really is necessary till the land is worked over too often (by a settled people). It is further to be remarked that the mill-stone, *dr̥śād*, is mentioned only in viii. 61. 4, and in the late passage, vii. 104. 22. The only passage that mentions *ūpalā* is ix. 112. 3 (also late); the nether mill-stone, *ūpara*, is mentioned at i. 79. 3; x. 94. 5; 175. 3. Ere mill-stones pressed, loose 'stones' pounded *soma*.

ḡāb (whereas in ii.-vii. the converse is the case, viz., the geographical data refer little to the West but often to the Puñjāb); and that in viii. especially many proper names seem to find their explanation in the West. These points I will now discuss briefly in their order.

It has strangely been assumed by Ludwig (*Rig Veda*, vol. iii., p. 200) that the title Seven Rivers, which is the Iranian name for India, occurring in RV. only in viii. 24. 27, is evidence of the antiquity of the eighth book. This can hardly be the case. The seven rivers are well known to the early poets. Had this been the name of their country given to it by themselves, it is incredible that they should have consistently used 'seven rivers' to mean seven streams and never once to mean the name of the country. Nor is it probable that having been the name of the country it should pass into such oblivion as never to be used as such (on the supposition that viii. is older than ii.-vii.). On the other hand, as the name given, not by the Vedic Aryans, but by their Iranian neighbors, it is quite conceivable that Seven Rivers should on occasion appear as a name among those who lived nearest to the Iranians, and perhaps occupied the same territory with the latter.

In regard to the Five Peoples, I have before this expressed doubt whether they are identical with those Vedic peoples who are supposed to be the Five, and as I hold still to this opinion, I do not refer the Five Peoples necessarily to the Puñjāb or to Turvaṣa, Yadu, etc., wherever they may have been located. But in regard to the relation between the poets of viii. and the Five Peoples, it is clear that while the poet of viii. 52. 7 speaks as if he belonged to the Five Peoples, those of viii. 32. 21-22 (Medhātithi Kāṇva) and viii. 9. 2 (Çaḡakarna Kāṇva) speak as if the Five Peoples were remote. In the passage of viii. 32, the poet begs Indra to pass over the Five Peoples and come to him: *ātīhi manyuṣāvāṇam . . . upārane . . . ihi pāṇca jānāṃ āti*. Just as the poet says "pass over the sinful presser," so he adds "and over the Five Peoples."* In the passage, viii. 9. 2, again, the Five Peoples are correlated with two other words expressing remoteness: "whatever is in mid-air, in the sky, or among the Five Peoples;" just as in 10. 1 it is said "if ye are on the far stretch of earth, or yonder in the gleam of the sky, or on the sea."

In the geographical allusions of viii., as compared with those of the other family books, the following points are especially important. In the other books the Çutudrī, the Vipāç, and the Paruṣṇī, all in the Puñjāb, are the best known rivers, apart from the Indus. The Ganges, the Dṛṣadvatī, and the Jumna (Yamunā) are mentioned only in these family books.† In respect of the Sarayu, which is probably a western stream, not an eastern river, a poet in iv. 30 alludes to it as if it were the boundary of his knowledge, and says

* Compare the use of *āti* in *āti kyatam*, viii. 62. 15, and in 54. 9, with the idea of 64. 15. Similar is the use of *tiras*, in 33. 14; 55. 12.

† The Ganges is mentioned in x. 75. 5; vi. 45. 31; the Dṛṣadvatī, in iii. 23. 4; the Jumna, in v. 52. 17 and vii. 18. 19.

that Indra slew "beyond the Sarayu." There is also a vague allusion to 'Drbhīka,' so vague as to show that the Derbiker people were already a myth, ii. 14. 3.* In viii., one poet alludes to the Asiknī and the Indus; and another apostrophizes the Paruṣnī, but the latter hymn is not by a Kāṇva, but by a member of the Atri family; while the former hymn alludes not only to ploughing but at the same time to the Pañcālas (Krivis); so that it seems to be later than most of the hymns in the eighth book. The Sarasvatī is mentioned in one hymn of the Vālakhilya and in a *dānastuti*; but otherwise only in an Atri hymn.†

In conformity with the intermediate character of v., between viii. and the other family books, stands the geographical agreement; for it is only in the Atri collection, v. 53. 9, that the Kabul and Kurum are mentioned (along with the mythical Rasā, the unknown Anitabhā, the Sarayu, and the Indus). On the other hand it is a Kāṇva poet who gives us the only reference in RV. to the Swat river, northwest of the Puñjāb; and Vigvamanas Vāiṣṇava, who apparently belongs to the Kāṇva family, gives us what is the only allusion, apart from the General Books, to the Gomatī, on the west of the Indus (viii. 19. 37; 24. 30). It is, further, worth mentioning that what may perhaps be the connecting links, geographically speaking, between the Kabul and the Puñjāb, viz., the Čaryanāvati and the Ārjikas, appear nowhere in other family books, but several times in the eighth.‡

The proper names in viii. afford a good parallel to the common vocabulary. The correspondence is such as to show a marked rapport between viii. and v., the General Books, and late literature. With the names of the other family books there is little contact save in the case of two or three seers and the peoples' names Turvaṣa, Yadu, Anu (Ānava), Druhyu and perhaps Pūru (53. 10).§ Jamadagni is cited once, and Divodāsa appears, but only as *dāivodāsa* (*agnī*). Of poet's names, Kākṣivant|| is about the only one that connects viii. with other family books than v. (Auçija, Pajriya; in viii. alone Varo-Pajra Sāman; Suçāman in viii. and Epic).‡ Thus Apnavāna is early; but in viii. only his method, as that of one of old, is known (*apnavānavāt*).

* Not only is the interpretation of the name Prthuparçu, in vii. 88, doubtful, but the date is impaired by the fact that the hymn lacks the Vasiṣṭha stamp.

† Indus and Asiknī, viii. 20. 25; Paruṣnī, 63. 15; Sarasvatī, 21. 17, 18; 38. 10; Vāl. 6. 4. That the first passage is late is indicated further by its vocabulary (*dvīpā*). The only certain allusion to the Puñjāb among the Kāṇvas is in this late hymn!

‡ Hillebrandt, *Ved. Myth.*, pp. 137-143. It is of course still doubtful whether the locality is N. W. of the Puñjāb.

§ Āyu, Manu, the Bhrgus and Uçanas Kāvya are early as well as in viii. But the Yatis appear only in viii., x. Kutsa Ārjuneya appears (with Bhrgu) both early and late.

|| Compare Čruta-kakṣa, only in viii. Kākṣivant, iv. 26. 1; viii. 9. 10.

‡ Ekadyū (once in viii.), said to be son of Nodhas, is perhaps connected, as the latter is called Kākṣivata as well as Gāutama in later literature. The protégés of the Āçvins, Babhru and Paktha, also occur in viii. and early books. For the others, and the demons, see below.

A good test is afforded by the patronymics. In one case only, and that is in v., does viii. have the original name and the earlier book have the patronymic; viz., Rūcāma in viii. (Pavīru in Vāl.), Rūcāmās in v. But observe the difference. While Atithigva occurs in other family books, Atithigva occurs only in viii.; while Āgvamedha occurs in v., Āgvamedha occurs only in viii.; while Tugra, and Bhujyu, his son, are early, the forms Tugrya and Tāugrya are found only in viii.* while Trāsadasyu occurs early, Trāsadasyava occurs only in x. and viii.†

But it is from the names that occur both in viii. and in subsequent literature that one sees how large a proportion of all the names in this book is late. Some of these are of Epic fame. Thus the saint Agastya, so well known in the Epic, is mentioned in RV. only in viii., i., x., and the late hymn vii. 33. Prthī Vāinya is known only to viii. and x., but is well known to AV. With him stands Dīrghatamas, known as such only in viii., i., and the Brāhmanas (Āncathya in i.; Ucathya, perhaps as adj., in viii. 46. 28; Māmateya in iv.; perhaps Mamatā in vi.); and, again, Vyāçva, Vāiyyāçva, viii., i. (ix. and viii., *vyāçvavāt*), and Viçvamanas (adj. and name), x., viii. Other examples are Sobhari, viii. and AV. (Sāubhara in Brāh. and Epic); perhaps Ruma, viii., with Rumanvant, Epic; Çrut-arvan Ārkṣa, viii., x., Epic; Çara (called Ārcatka in i., and also by the late name Çāuradevya in viii.), occurring in viii., i., and Epic; Kali, in i., x., and (in pl.) viii.; Mandhātara in viii., Māndhātara in Epic (as father of Purukutsa); Upastuta in viii., i., x.; Viṣṇūpā (son of Viçvaka, viii.), in viii., i., x.; Nabhāka (Nābhāka), viii. and Brāh.; Çinjāra, viii., x.; Aṅgu, viii. and VP.; Triçoka, viii., i.

Evidences of special rapport between viii. and v. are: first the Atreyan hymns in viii.; the *Kāṇvahota* of v. 41. 4; the Gopavana of viii. 63. 11, to whose name the Anukramanī adds the patronymic Ātreya; and Çyāvāçva, mentioned in viii., and author of hymns in v. In an Atri hymn, Saptavadhri, known in viii., v., x., appears. The Atris are mentioned by the Kāṇvas in viii.‡

There is little to offset the array of names common to viii. and the late books. As said above, Agastya is surely late; and Virūpa is perhaps late. The other names in viii. are chiefly either names of foreigners or native names of late origin. Of the latter class, there is Kṛpa, Epic name found in RV. only in viii.; Āsaṅga, a Brahmanic word, used as proper name only in vii.;

* So Sāhvarāṇa occurs in early books, while Sāhvarāṇi occurs only in Vāl. Pāṛṣadvāṇa in Vāl. has no Pṛṣadvāṇa beside it.

† But Pāurukutsya (Kutsi) occurs in early books, as does Purukutsa. Compare Pāura (early), and Trkṣi, in viii. and vi. 46.

‡ Lanman, *loc. cit.*, p. 578. In i. and viii. is mentioned Virūpa, who appears also in iii. 58. 7, apparently a late verse.

§ The Gāutamas (Gotamas) also are mentioned, but only in their own hymn (viii. 77. 4). Only i., v., x. mention the Kāṇvas. The Priya-medhas and Medhyātithi appear only in viii., i., x. and viii., i., ix., respectively. Kāṇva's father, Medhātithi (Epic, but see RV. x. 31. 11; i. 117. 8, Nṛṣad), appears only in viii.

Plāyogi, which is used only in viii., and is either late or dialectic, like Talukṣa for Tarukṣa; *vibhīndū*, as adj. in i., but as name in viii. and in Brāh. (*Vibhīnduka*); *durgūha*, adj. and common noun in early books, but a name in viii. 54. 12 (where are mentioned the *nāpāto durgūhasya*), and recurring in the patronymic form *dāurgahā*, in the notoriously late addition to iv. 42, and in the Brāh.; *svarnura* and *gaviṣṭha*, as adjectives in early books, and then in viii. as names; and the late name Kṛṣṇa, a poet. *Tiraçcī*, another poet, has a name of late look; it occurs only in viii. and Brāh. The value of Nāhuṣa and Vāvātar is doubtful. Another of these words which appear early as adjectives and later as names is *ādhrigu* (as name, in viii. and i.); so probably *prapathin*, an adj. in vi., a name in viii.

Other late names are Āurva, in *āurvavāt*, in viii., Brāh., and Epic; Ārabha, viii. and Epic; and Kuṇḍa-pāyva, descendant of Āṅga-vṛs. Compare the Epic Āṅgin, name of a seer, and the Epic Kuru names Kuṇḍaka, Kuṇḍadhāra, Kuṇḍāgin, etc.

The Kurus, Krivis, and Cedis, all of Epic fame, appear in viii., but not in ii.-vii. The Cedi king, Kaṇu, is praised in viii. as a giver of *āstra*, etc. The Kuru-name appears in Pākasthāman Kāurayāna and Kuruṅga.*

The *agva*-names, Vaṇa Aṇva (viii., i.), Vyaṇva (p. 64), Ninditāṇva, Ātreya Āyāvāṇva (compare Āyāva and Āyāvaka in viii.), might suggest that Iranian *aspa*-names are here reproduced; and such may be the case. But it is worthy of note that the best district in India for horses is the Puñjāb. The Saindhavan breed is famous through Sanskrit and Pāli literature. The prince who "gives more horses than any other mortal" lives in the Puñjāb on the Paruṣṇī (viii. 63. 15).† But Āyāva lives on the Swat. The gifts of Vaṇa Aṇva come from Pṛthuṇravas Kāṇita, who has been credited with cis-Indic origin, as have been also Balbūtha, Parṇu, Tirindira, and Tarukṣa. All these are known only in (i.) viii. Pārāvata, once in viii., may be the name of a western prince. With him is mentioned Vasurocis.

The *puru*-names I have given above, p. 42. Two are solitary, Purumāyva and Puruhanman; while Purumīḍha occurs in viii., i., and v. Whether their prior element is the proper name *Puru* or the common adjective *puru* is uncertain.

A few more names remain to be noted. Daṇvraja and Goṇarya, otherwise unknown, occur in viii. and Vāl.‡ Narya and Sthūrayūpa occur only in viii., the latter perhaps as a reminiscence. Praskanva (above, p. 59) is mentioned only in i., viii., and

* Kānvāyana, Vāl., Ukṣanyāyana, and Harayāna are lone nom. prop. in viii.; but probably the form is for Kāurāyana. Kuru appears in x. (*-krāvana*).

† In *Am. Journ. Phil.* xv., p. 156, I have shown that India was not so badly off for horses as Roth and Brunnhofer supposed.

‡ The Vāl. abounds in names not elsewhere known: Rjūna, Dīrghanītha, Daṇaṇipra, Daṇanya, Dasyave Vṛka, Nīpātithi, Puṣṭigu, Āṇuṣṭigu, Pṛsadhara, Āṣṭha, Sainvarta. The Vāl. contains Kṛṇa (also in x.), Syūmarāṇmi (also in i.), and Rjīṇvan (also in early books).

Vāl. The young woman, Apālā, is mentioned in a hymn not very old. Of the demons, Namuci, Arbuda, Pipru, and Ćuṣṇa (and Mṛgaya?) are old names; much less old are Śrbinda and Anarṣani (neither found till viii.—compare the ἀν. λεγ. *ánarṣa-rāti*, also in viii.), and Ahigva Āurnavābha, which last occurs in viii. and x. Both the Kāṇvas and the Pārus are occasionally regarded as devils in late works (so AV.; RV. x. 61. 13; RV. vii. 8. 4 as interpreted by Brāh.).

The possibility of western relationship is strengthened not only by the references to probably western princes, but by two or three further facts. Thus, the (Iranian) custom of exposing old people to die is alluded to as known only in a late Kāṇva hymn.* It is only in the eighth book that the Babylonian *mund* (67. 2) appears. From a religious point of view, it is, indeed, saying too much to ascribe to Iranian influence the fact that, as has been pointed out by Müller, *Vedic Hymns*, p. 244, the eighth book alone gives undivided homage to the abstract Aditi (viii. 19. 14). But the unique position of the Gandharvas, which has been recognized by E. H. Meyer and acknowledged by Hillebrandt (*loc. cit.*, p. 207) may perhaps be due to the proximity of the Iranians. In fact, *tsarad gandharvām āstrtam* (viii. 1. 11) reads almost like an echo of the *yō ajanat gandarewem* in Yt. 19. 41 (which Geiger, *loc. cit.*, p. 206, makes refer to the Hindus).† Hillebrandt himself has called attention (*loc. cit.*, p. 438) to the peculiar position of the Kāṇvas in respect of their preparation of *soma*.‡

But that the indications of western habitat do not prove that the hymns there composed are early is shown, apart from vocabulary, by the fact that the Swat is not mentioned in the body of the hymn in which it occurs but in its *dānastuti*; that Tīrindira also appears in a *dānastuti* (6. 46); that the (western?) Pārāvata prince appears also only in a *dānastuti*, etc. So the late Cedis appear in *dānastutis*.§

The eighth book is not without other correspondence with the Avesta. The only cases of *āt* for *at*, which in form at least is Avestan, are cited from viii. 5. 31; 11. 7; 48. 5; i. 30. 21; x. 22. 6; 158. 1. The short thematic *a* in *ānām* of the genitive plural is Avestan, and this too is found only in i. 44. 2=viii. 11. 2; i. 188. 11; x. 136. 6; 174. 5.¶ If this were an old license, one would expect to see it imitated in other family books. But apparently

* Vāl. 3. 2. Compare Zimmer, *loc. cit.*, p. 328; Geiger, *loc. cit.*, p. 273.

† Compare viii. 66. 5: *abhi gandharvām atṛnat*.

‡ I may here refer again to the fact, brought out in my last paper, that the (Iranian) sacrosanct number 33 is employed in RV. almost exclusively in viii. among family books (i. 34. 11; 45. 2—both Kāṇva hymns; 139. 11; iii. 6. 9; viii. 28. 1; 30. 2; 35. 3; 39. 9; ix. 92. 4; Vāl. 9. 2). It is quite inconceivable that, if viii. were the oldest book, such a designation of the gods should so pass the other family books to reappear subsequently (in AV. and all later literature) as the regular number of gods.

§ Compare viii. 20. 24; 22. 12; Vāl. 3. 8; viii. 5. 39.

¶ Lanman, *loc. cit.*, pp. 387, 352.

it is introduced by the poets of viii. and imitated by the later hymnists of i. and x. All three hymns of viii. are assigned to Kāṇvas.

The time to formulate nicely any positive results in this field, which still invites investigation, is not yet come; but I would suggest tentatively that the observations made in the course of this paper indicate with some verisimilitude, first, that much of the Kāṇva collection is late (like the Avesta); and second, that at least a branch of the Kāṇvas lived in the Northwest, near the Iranians, perhaps not far from where the late Atharvan was patched together.

In the next paper, on the phraseology of the eighth book, I shall show to what extent the Kāṇva collection consists of scraps of older hymns. The title *prāgāthikāni* is meant to cover the Kāṇva collection as a whole.

Availing themselves of the space on this page, the Editors add the following table of contents of Professor Hopkins's

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ARTICLE III.

THE MALAYAN WORDS IN ENGLISH.

BY CHARLES PAYSON GURLEY SCOTT.

Presented to the Society, April, 1896.

ENGLISH etymologists hav many imperious calls upon their attention. Every language within the corners of the four winds hoists a signal as they sail by in their hurried circumnavigation, and it is no wonder if in their haste to reach home within the time set in their articles, they ar tempted to ignore many of these invitations to parley, or at most to cut the parley short, treating such outlying tongues merely as ports of call, to be seen and left within the waning of a winter's afternoon.

Even if time wer given, it too often happens that the means of finding out these remoter facts and of forming therefrom a judgment, ar not at hand, and can not be reacht.

And even if time and means ar granted, there is the difficulty to be overcome of learning, before the ship sails on, the details of many outlandish tongues, written often in outlandish characters, and ill provided with the critical apparatus which is so abundant for the principal Aryan and Semitic tongues.

Nevertheless, difficulties do not form a complete excuse; and the English etymologists who ar compeld, by their very office, to touch many things which they can not hope to adorn, to enter many fields which they can not hope to conquer, may yet go some way forward, and make some spoil for their pains. And indeed they do sometimes make spoil, with other pains than their own.

Of such an excursion, made along etymological lines, in a remote but large and important group of languages, this paper presents some results.

It deals with the words which hav come into the English language from the East-Indian or Malayan Archipelago, the land of the orang-utan and the sapi-utan, of the babirusa and the banteng, of the bruang and the dugong, of the siamang, the kahau, and the wauwau, of the maleo and the cassowary, and of that once mythic bird called the manucondiata, 'the bird of heaven' or paradise; the home of the kris and the gong; the

land of the myriad isles, the sea of lucid waters and rainbows in the deep—a region, if we are to believe the purple tales of travelers, like that where

“—the spicy breezes
Blow soft o’er Ceylon’s isle,
[Where] every prospect pleases,
And only man is vile.”

Indeed, in one version, it is the same region; for in Heber’s hymn, in one edition (1827), the breezes “Blow soft o’er *Java’s* isle” (Julian, *Dict. of hymnology*, 1892, p. 399).

More precisely, the paper deals with Malayan words in English; that is, with English words, or words which may be regarded as at least entitled to recognition in an English dictionary (if there is any longer any such thing as an English dictionary), that have come, directly or indirectly, from Malayan sources. It is necessary to apply some tests, which will be indicated later, to determine what words shall be admitted under the name of English or of Malayan. In this paper I use “Malayan” in a general sense, linguistic and geographic, and confine “Malay” to the one language so called, which, however, owing to its receptive character, includes a great number of external “Malayan” words. It is hazardous to say of any “Malayan” word that it is original “Malay.”

In the first process, that of collection, I have been rather liberal. The notion of a liberal collection must always be agreeable to the theological mind, and I am fortunate, reading this paper at the seat of a famous seminary of theology, in being thus able to secure at the outset a pleased attention from at least a part of my audience. I can only hope that when I hand up the plate and retire to my pew, the cheerful face of expectation will not be clouded by more than the usual gloom.

I have collected all the English, or nominally English, words I can find, which have, or are said to have, or seem to have, their origin in the Malay language or the Malayan group of languages. These English or nominally English words have been gathered out of general English literature, from books of exploration and travel, Hakluyt, Dampier, Hamilton, Forrest, Wallace, Bickmore, Forbes, Thomson, Bird, and others; from translations of foreign books of travel, as Linschoten, and others included in the Hakluyt Society’s series; from works treating of the political and natural history of the Archipelago, as Marsden’s *History of Sumatra*, Raffles’s *History of Java*, Crawford’s *History of the Indian Archipelago* and his *Descriptive dictionary of the Indian islands*; from political reports, commercial lists, etc., and of course from the English dictionaries, the Malay-English dictionaries, and such works as that of Colonel Yule. A list of the works most used is given further on.

To these English or nominally English words I have annexed other words or forms from other languages more or less involved in the

same history. All are supported by quotations, many or few, all dated and verified.

The words so collected I then undertook to etymologize, at the same time putting them into classes according to their ascertained or probable status with respect to the English, and to the Malayan or other Oriental languages.

The English or nominally English words were separated according to their actual standing in English, several tests, as of frequency of use, of acceptance in standard literature (I play that there is a standard literature), of independent use by diverse authors, and of relative interest, being applied to discriminate the words and lead to the final selection of the list which forms the main basis of this paper—namely, the English words, truly regarded as such, which have their ultimate origin in the Malayan languages.

As the number of such words is considerable, and as they form an important element in the English language, it is worth while to make the attempt to ascertain and make known their true history and their actual relations.

And there is also a larger view. These words from the Far East which appear in English, appear also, most of them, in the other great languages of Europe, and are a part of the universal vocabulary of civilization.

On the Malayan side my investigations have been wholly etymological. Every word in my lists I have sought to find and to trace through all the Malay dictionaries at my disposal—Marsden (1812), Elout, translation of Marsden (1825), Roorda van Eysinga (1825), Crawford (1852), Pijnappel (1863), with Klinkert's Supplement (1869), Favre (1875), Wall and Tuuk (1877–1884), Badings (1884), Swettenham (1881, 1887), Klinkert (1893), Clifford and Swettenham (A 1894, B 1895, the rest to come), and other works cited in the quotations. [Of the above named works, Elout (1825) and Badings (1884) are but seldom cited, being of little independent value.] Then I sought the same or related words in dictionaries of the related or adjacent languages, as Achinese (Arriens 1880, Bickers 1882, Langen 1889), Lampong (Helfrich 1891), Nias (Thompson and Weber 1887), Javanese (Roorda van Eysinga 1835, Groot and T. Roorda 1843, Favre 1870), Sundanese (Rigg 1862), Balinese (Eck 1876), Dayak (Hardebrand 1859), Macassar (Matthes 1859), Bugis (Thomsen 1833), together with many minor glossaries and wordlists of the languages of the same and other parts of the Archipelago, including some regarded as 'dialects' of the general Malay, and some allied only as members of the broad Polynesian group.

The present paper is intended to contain only "native" Malayan words, that is, English words fairly entitled to be so regarded, which can be definitely traced to the Malay language as presented in Malay dictionaries, and can not be certainly traced further, *outside* of the Archipelago. The three tests are (1) the word must be in English use, (2) it must be found in one or more

Malay dictionaries, (3) if not ultimately Malay, it must at least have originated, so far as known, within the Malayan region. The words which answer these tests, with the proofs and illustrations as they stand in my manuscript, are too numerous to be treated in this paper. I select those which are of most importance or of most interest, and give the full list at the end.

The plan of the paper is as follows: The articles are arranged in the alphabetic order of the English forms. Each article consists of several divisions, coming always in the same order:

(1) The English form with a brief identifying definition, and with variant spellings, present or past, if any. In some cases, other European forms are added.

(2) The Malay form, in the Malay character, with transliteration; and explanation of formation, if known.

(3) Form in other Malayan languages, if any.

(4) Citations from various Malay dictionaries, in chronological order, showing the actual form and definition assigned.

(5) Citations for other Malayan languages, if any are concerned.

(6) Citations from English works in chronological order, showing the actual use of the word in English.

All Malay words, that is, all words entered as real or nominal Malay words in Malay dictionaries, are given, in the first instance, in the Malay character (which is Arabic with a few additional letters distinguished by three dots), and also in English transliteration, according to the noble "Roman" system, to which I have made the Dutch and French conform. It beats the Dutch and the French both. I note here that Dutch *tj* answers to English *ch*, the established infelicity for *ts*, Malay in one letter ج *chā*. Favre uses for this the otherwise unused infelicity *z*.

Dutch *dj* in like manner answers to English *j*, Malay ج *jīm*. Dutch *oe* answers to English *ū* or *u*, Malay و *wāu*. The rest is obvious.

For more precision, all Malay words as above defined, are, in the Roman transliteration, whether English, Dutch, or French, printed in upright spaced letters.

Some of the Malayan languages, as Batak, Lampong, Javanese, Macassar, Bugis, and also the Tagala and Bisaya of the Philippine islands, have peculiar alphabets of their own. The Sundanese appears sometimes in Javanese characters, sometimes, like the Achinese, in Malay. All are also rendered, by Europeans, in the Roman character. I regret that it is impossible to reproduce these native characters here. They would greatly add to the unintelligibility of my pages. I can give only the Roman transliteration. For the original characters, where they exist in the passages I quote, I substitute three dots (. . .), which will probably satisfy nearly everybody.

The dates put before the author's name and the title of the book, if not followed by a later date within curves after the title, mean that the quotation is taken from the identical edition of

the prefix date. If a later date follows, after the title, the quotation is from the later edition so dated. In some of the minor wordlists quoted, taken from periodicals, the date and paging ar of course those of the periodical.

A date in my own text, within curves, following a Spanish, Portuguese, Italian, New Latin or English form in italics, is the date of the earliest quotation for that form, in Yule's collection of quotations, or in my own. It means only that the word is found at least as early as the date given. The actual first appearance of the word in the language mentiond, may hav been twenty, fifty, a hundred years earlier. Historical etymology without dates is mere babble. Any date, if true, is better than none.

The quotations ar all first-hand, unless markt otherwise. Those taken from Yule's indispensable collection ar markt (Y.). Some are due to the *Stanford dictionary* (S. D.); a few to the *New English dictionary* (N. E. D.), and the *Century dictionary* (C. D.).

In view of the near approach of the twentieth century, I hav modernized some of our sixteenth century spellings in order to make them worthy of the nineteenth before it is too late. In this I follow the advice of all English philologists; who advise well.

The following is a list of the principal works used in the preparation of this paper. It is confined almost wholly to dictionaries and wordlists of the languages of the Malayan Archipelago, in my own library. A few English works of special value, as Yule's *Anglo-Indian glossary* and Wallace's and Forbes's travels, ar included in the list. The titles of other works used will appear in the quotations.

The works ar listed in the alphabetic order of the authors' names. When cited, they ar preceded by the date as a constant part of the author-reference. The names of the works most often cited, ar in the quotations commonly reduced to date and author's name only, "1812 Marsden," "1875 Favre," etc., with the locus added.

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CLERCQ, F. S. A. de, *Het Maleisch der Molukken. Lijst der meest voorkomende vreemde en van het gewone maleisch verschillende woorden, zooals die gebruikt worden in de residentien Manado, Ternate, Ambon met Banda en Timor Koepang, benevens pantoens, prozastukken en gedichten.* Batavia, 1876. Square 8vo, 96 p.

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CRAWFURD, John, *A grammar and dictionary of the Malay language, with a preliminary dissertation.* In two volumes. Vol. I. *Grammar.* Vol. II. *Malay and English, and English and Malay dictionaries.* London, 1852. 8vo, vol. 1: 291 + 84 p.; vol. 2: 4 + 208 + 201 p.

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EKRIS, A. van, *Woordenlijst van eenige dialecten der landtaal op de Ambonsche eilanden*. Rotterdam, 1864-65. 12mo. (In:p. 61-134.)

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ELOUT, C. P. J., *Dictionnaire hollandais et malai, suivi d'un dictionnaire français et malai; d'après le dictionnaire anglais et malai de Mr. W. Marsden*. Harlem, 1826. 4to, 432 p.

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GRASHUIS, J. G., *Dr. Roorda van Eysinga's algemeen Hollandsch-Maleisch woordenboek, herzien en vermeerderd*. Leiden, 1878. Large 8vo, 16 + 1005 p.

GROOT, A. D. Cornets de, *Javaansche spraakkunst, uitgegevendoor J. F. C. Gericke....tweede verbeterde en vermeerderde uitgaaf, gevolgd door een leesboek tot oefening in de Javaansche taal, verzameld en uitgegeven door J. C. F. Gericke; op nieuw uitgegeven en voorzien van een nieuw woordenboek door T. Roorda....* Amsterdam, 1843. 8vo, 12 + 10 + 15 + 8 + 236 + 45 + 254 + [1] p.

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KLINKERT, H. C., *Nieuw Maleisch-Nederlandsch woordenboek met Arabisch karakter, naar de beste bronnen bewerkt.* Leiden, 1893. Large 8vo, 7 + 712 p.

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WALLAND, J., *Het eiland Engano.* Batavia, 1863. 8vo, 10 p. In the same, p. 330-339.

WEBER, E. A. T. See THOMAS.

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Abada, a rhinoceros, a word frequent in the Hakluyt period; also *abado*, and once *abath*. It is a transfer of Portuguese *abada* (a. 1598), Spanish *abada* (a. 1585), New Latin *abada* (1631). This is a mistaken form, arising probably by attraction of the vowel of the article *la* (*la bada* taken as *l'abada*), of what was also used in the proper form *bada*, Portuguese *bada* (1541), Spanish *bada* (1611), Italian *bada* (c. 1606), (not noted in English or New Latin). See the quotations in Yule. *Bada* seemd to be feminine, and hence was by some thought to be "the female Vnicorne."

The word is found in all the principal languages of the Malayan Archipelago. *Bada* is from Malay بادق *bādak*, a rhinoceros. Achinese *badak*, *badək*, *baduēh*, Batak *badak*, Lampong *badak*, Javanese *warak*, Sundanese *badak*, Balinese *warak*, Dayak *badak*, Macassar *bada*, Bugis *badak*. The final ف *k* in Malay pronunciation is faint, and often silent. It does not appear in the Macassar form, from which, indeed, the Portuguese and Spanish *bada* may have been derived. It is absent in the English render-

ing of several Malay names of places, as in *Ava*, Malay آو *Āwa*, *Batta* beside *Batak*, Malay باتق *Bātak*, *Sulu*, *Sooloo*, Malay سولق *Sūluq*. So *Perak* ثيرق *Pērak*, *Dayak* دايق *Dāyāq* are usually pronounced without the *k*.

The pronunciation of the form *abada* must have been, of course, a-bā'da. An erroneous accentuation ā-ba-da may have been in use also; the form *abath* implies this. But the form *abda*, which if genuine, would prove the latter accentuation, is a mistake (see below).

Badac. Rhinoceros.

1631 HAEX, p. 4.

بادق *bādak* the rhinoceros. Tandok *bādak* or *chūla bādak* the rhinoceros horn.

1812 MARSDEN, p. 31.

بادق *bādakh* eenhoorn, rhinoceros. *Bādakh* *gādjah* rhinoceros met één hoorn. *Bādakh* *karbau* rhinoceros met twee hoornen.

1825 ROORDA VAN EYSINGA, p. 36.

Badak (J. *warak*). The rhinoceros.

1852 CRAWFORD, p. 14.

بادق *badak*, neushoorn; — *gadjah*, n. met één, — *karbau* n. met twee hoorns; *lidah* — cochenille-cactus. (Bat. id. Jav. *warak*. Mak. *badā*.)

1863 PIJNAPPEL, p. 27.

بادق *bādak*, le rhinocéros....Jav. . . *wadak* [read . . . *warak*]. Sund. . . *badak*. Bat. . . *badak*. Mak. . . *bada*. Day. *badak*.

1875 FAVRE, 2: 164.

بادق *bādak*, neushoorn: *tjela b.*, het hoorn van den neushoorn: *lidah b.* (neushoortong), naam der cactusachtige gewassen, inz. van den cochenille-cactus....

1877 WALL and TUUK, 1: 184.

Bādak بادق a rhinoceros.

1881 SWETTENHAM (1887), 2: 7.

بادق badak, rhinoceros, het neushoornier; b. gadjah, die één en b. kərbau, die twee neushorens heeft.... 1893 KLINKERT, p. 80.

Badak, rhinoceros; Badak gadjah, eenhoornige rhinoceros; Badak kərbau, tweehoornige rhinoceros; Tjoela badak, hoorn van een rhinoceros; Lidah badak, opuntia cochinillifera, een heester, veel aangekweekt voor de cochenillecultuur. 1895 MAYER, p. 27.

Bādak, بادق. The rhinoceros....

1895 CLIFFORD and SWETTENHAM, p. 106.

Badak neushoorn. 1879 DIAS, *Lijst van Atjehsche woorden*, p. 160.

Badaq rhinoceros, badoe-eh.

1880 ARRIENS, *Maleisch-Hollandsch-Atjehsche woordenlijst*, p. 8.

بادق badêk, neushoorn; rhinoceros; soemboeh —, de hoorn van den rhinoceros. 1889 LANGEN, *Woordenboek der Atjehsche taal*, p. 26.

Badak (ook Ab[oe]ngsch. v. H.), rhinoceros.

1891 HELFRICH, *Lampongsch-Holl. woordenlijst*, p. 33.

Warak, neushoornier, renoceros. 1835 ROORDA VAN EYSINGA,

Algemeen Javaansch en Nederduitsch woordenboek, p. 641.

... [warak] N[goko et] K[rama], rhinoceros.

1870 FAVRE, *Dictionnaire javanais-français*, p. 290.

Badak, the rhinoceros, *Rhinoceros Sumatrensis*....

1862 RIGG, *Dict. of the Sunda lang.*, p. 29.

Warak rhinoceros.

1876 ECK, *Balinesch-Holl. wrdbk.*, p. 149.

Badak, d. Nashorn.

1859 HARDELAND, *Dajacksch-deutsches wörterbuch*, p. 24.

Badak rhinoceros.

1885 AERNOUT, *Woordenlijstje der Tidoengsche taal*, p. 541.

... Bādā, bep. bādaka. 't Mal. bādakh rhinoceros.

1859 MATTHES, *Makassaarsch-Hollandsch woordenboek*, p. 173.

Rhinoceros ... badak badak.

1833 [THOMSEN], *Vocab. of the Eng., Bugis and Malay lang.*, p. 20.

The English use appears, as in the case of many other strange animals then first heard of in the far East, and the far West, in the voyages and histories composed or translated in the later decades of the sixteenth century.

It is a very fertile country, with great stoare of prouisioun; there are elephants in great number and abadas, which is a kind of beast so big as two great buls, and hath vppon his snowt a little horne.

1588 R. PARKE, tr. Mendoza (orig. 1535), *Historie of the great and mightie kingdom of China*, etc. (Hakluyt soc., 1853), 2:311. (Y.)

We sent commodities to their king to barter for Amber-greese, and for the hornes of Abath, whereof the Kinge onely hath the traffique in his hands. Now this Abath is a beast which hath one horne only in her forehead, and is thought to be the female Vnicorne, and is highly esteemed of all the Moores in those parts as a most soveraigne remedie against poyson.

1592 BARKER in Hakluyt (1807), 2:591. (Y.)

The *Abada*, or Rhinoceros is not in India, but only in Bengala and Patane. 1598 tr. LINSCHOTEN, *Discours of voyages into y^e easte & weste Indies*, p. 88 (Y.); repr. Hakluyt soc. (1885), 2:8.

Also in Bengala are found great numbers of the beasts which in Latine are called *Rhinoceroses*, and of the Portingalles *Abadas*.

1598 *Id.* p. 28 (Y.); repr. Hakluyt soc. (1885), 1:96.

Camboia lyeth Southward from thence, a great and populous Countrie, full of Elephants and *Abada's* (this Beast is the Rhinoceros).

1613 PURCHAS, *Pilgrimage*, p. 387.

In Bengala are found great numbers of *Abadas* or *Rhinoceroses*, whose horn (growing up from his snout,)...is good against poyson, and is much accounted of throughout all India. 1613 *Id.* p. 400.

[This passage is quoted, with the unmarked omission of some words (from "snout" to "is good"), and with the reference "(1864) 2," in the N. E. D.; and the word *Abadas* is erroneously printed *Abdas*.]

See other quotations in Yule and the *Stanford dictionary*; and references in Pennant, *Synopsis of quadrupeds*, 1771, p. 75.

Ailantus, a beautiful East Indian tree, *Ailantus glandulosa*, Desf., well known in European and American towns, where it is planted as a shade-tree. The name, which is also found as *ailanto*, is not commonly recognized as Malay, but that is its ultimate origin. It has been referred to the Chinese, to the Sanskrit, and to one of the languages of the Molucca islands; and in all of these languages it has been said to mean 'tree of heaven.' The reference to the Molucca islands is correct; but the final explanation lies in the Malay.

Ailantus is also spelt, erroneously, *ailanthus*. It is from the New Latin *ailantus*, as used by Desfontaines (1786) in the erroneous form *ailanthus*, as the name of the genus.

Ailanthus glandulosa, Desf. in *Mém. Acad. Sc. Par.* 1786 (1789), 265, t. 8.—China. 1893 *Index Kewensis* 1:66.

The *Index Kewensis* mentions three other species, *A. excelsa*, *A. malabarica*, *A. moluccana*. The first and third of these specific names are especially appropriate to the name *ailantus*: for the name comes from the Molucca islands, and the tree grows high.

The Molucca name does not appear, in the precise combination required, in the glossaries and wordlists accessible to me; but the European reflex, and the meaning and locality assigned, make it clear that the original Molucca name from which Desfontaines, or the author on whom he depended, probably one of the Dutch naturalists, took the word, was **ai lanit*, or **ai lanitol*, which could be interpreted, literally, as 'tree of heaven,' tho the real meaning, as we shall see, is something different. *Ai* is the most common form, in the Molucca region, with numerous variants, *ai*, *aya*, *ayo*, *aow*, *ow*, and *kai*, *kao*, *kau*, etc., of the general Malay word for 'tree' or 'wood', namely *كاي* *kāyu*. *Lanit*,

lanitol, with *laniol*, ar Moluccan forms of the general Malay word for 'sky,' لاغت *lāngit*. The precise Malay combination *کایو لاغت* **kāyu lāngit*, the ultimate original of **ai lanit*, and so of the English *ailantus*, does not appear in the dictionaries; but its existence is implied in the 'dialectal' form mentioned, and is also indicated by the presence in French of *langit* as a synonym of *ailante*, *ailantus*. This *langit* must be a fragment of the full name **kāyu lāngit*.

The name could be interpreted as 'tree of heaven,' if that is taken as 'tree of the heavens.' The exact meaning, if *lāngit* is to be taken in its most usual sense, is 'tree of the sky.' There is no Elysian poetry in this. It would merely imply a tree that rises high in the air, a very tall tree. And the native *ailantus* is said to grow very tall. But *lāngit* means also 'a canopy, an awning, a ceiling, a cover'; the reduplicated *lāngit-lāngit* also means 'a canopy'; and in view of the use of the *ailantus* as a shade-tree, it is probable that the name refers to that fact—that it means merely 'canopy-tree,' or, in substance, merely 'shade-tree.' So that the sarcastic allusions to the unheavenly odor of the blossoms of the "tree of heaven" arise from an erroneous etymology. There is no "tree of heaven."

For the principal forms of *kāyu*, see the quotations under CAJUPUTI in this paper. The Moluccan and other 'dialectal' forms of *kāyu* have in great part lost the initial consonant, becoming *ayo*, *aya*, *ai*, *aai*, *oai*, etc.

Ai hout, boom (T. R. H. W. K. P. Kr. Ht. N. A.).

1864-65 A. VAN EKRIS, *Woordenlijst.... Ambonsche eilanden*, p. 69.

Hout | Maba, Gotowassi *aai* | Boeli, Waijamli, Bitjoli *oai* | Ingli *aai*.

1873 CAMBIER, *Beknopte woordenlijst van talen op Tidoreesch-Halmahera*, p. 1 (265).

Sago-boom | Maba, Gotowassi pipe *ayo* | Boeli, Waijamli-Bitjoli people *ayo* | Ingli pipi *aya*. 1873 CAMBIER, *Beknopte woordenlijst van talen op Tidoreesch-Halmahera*, p. 1 (265).

Hout, | Maleisch *kaijoe* | Aroe-eilanden—Wokam *kai*, Oedjir *kai* | Keij-eilanden—Eli Ellat *kaijoe*, Oorspronk *ai*.

1864 EIJBERGEN, *Korte woordenlijst van de taal der Aroe- en Keij-eilanden*, p. 5 (563).

Kajoe kaoe.

1874 JELLESMA, *Woordenlijst van de taal der Alifoeren op het eiland Boeroe*, p. 15.

Some Buruese words.... tree, *kaun*.

1885 FORBES, *A naturalist's wanderings in the Eastern archipelago*, p. 411.

Wallace (*Malay Archipelago*, 1869, ed. 1890, App. p. 490) gives the equivalents of *kāyu*, wood, in 33 languages, or rather 33 localities, *kayu* in 4, *kaju* in 1, *kahu* in 2, *kahun* in 1, *kaya* in 1, *kao* in 3, *kai* in 1, *ai* or *a'i* in 9 (chiefly in and near Amboina), *ow* in 1, *ow* in 1, with other forms *gagi*, *gáh*, *gota*, etc.

The word *lāngit* is found in nearly all the languages of the Malayan group: Malay *لاڠيت* *lāngit*, Achinese *langit*, Batak *langit*, Lampong *lungik*, *langit*, Javanese *langit*, Sundanese *langit*, Balinese *langit*, Dayak *langit*, Macassar *langi*, Bugis *langi*, Bareë *jangi*, Sangi-Manganitu *lāngih*, Jilolo *langit*, *langat*, Tagala *langit*, Bisaya *langit*, Malagasi *lanitra*, the sky, the firmament. It is a general Polynesian word, Maori *rangi*, *raki*, Samoan *lagi*, Tahitian *rai*, Hawaiian *lani*, Tongan *lugi*, Rarotangan *rangi*, Marquesan *aki*, *ani*, etc. 'the sky, heaven.' See Tregear, *Maori-Polynesian comparative dictionary*, p. 392-394.

Langit. Aerem & visibiles caelos denotat. Item conuexitatem, concamerationem, testudinem, quæ alicui imponitur exprimit.

1631 HAEX, p. 23.

لاڠيت *lāngit* the sky, visible heavens, firmament. *Būmī dan lāngit* earth and sky....

1812 MARSDEN, p. 296.

لاڠيت *lāngit* de lucht, het uitspanfel, de zigtbare hemel....

1825 ROORDA VAN EYSINGA, p. 349.

لاڠيت *langit*, uitspanfel, hemel. (Bat. Day. id. Jav. id., ook: wat boven drijft. Mak. *langi*.) *Lalangit* en *langit-langit*, verhemelte van doek boven een vertrek, of van den mond. 1863 PIJNAPPEL, p. 203.

لاڠيت *lāngit*, le ciel, le firmament....Jav. et Sund. ... *langit*. Bat. ... *langit*. Mak. et Bug. ... *langi*. Day. *langit*, Tag. et Bis. ... *langit*.

1875 FAVRE, 2:499.

لاڠيت *lāngit*, uitspanfel boven iets, bv. boven een ledikant; hemel, hemelgewelf.

1884 WALL and TUCK, 3:51.

لاڠيت *langit*, hemel, uitspanfel.

1889 LANGEN, *Woordenboek der Atjehsche taal*, p. 234.

Langik, heuvel, uitspanfel; *lalangik*, hemel van een bed; *lungik-langik*, verhemelte. *Langit* = *langik*.

1891 HELFRICH, *Lampongsch-Hollandsch woordenlijst*, p. 83.

Langngit, A. hemel, firmament, uitspanfel, gehemelte....

1835 ROORDA VAN EYSINGA, *Javaansch en Nederduitsch woordenboek*, p. 292.

... [*langit*] N. K. le plus haut, l'étendue, le firmament, le ciel....

1870 FAVRE, *Dict. javanais-français*, p. 336.

Lang'it, the sky, the heavens. (Jav. Mal. idem.)

1862 RIGG, *Dict. of the Sunda lang.*, p. 244.

Langit, de hemel, het uitspanfel, de lucht....

1876 R. VAN ECK, *Balineesch-Hollandsch woordenboek*, p. 164.

Langit, *batanglangit*, Himmel, Himmelsgewölbe....*Lalangit*, die Decke (eines Zimmers)....

1859 HARDELAND, *Dajacksch-deutsches wörterbuch*, p. 294.

... *lāngi*, bep. *lāngika*, uitspanfel, firmament, hemel. Boeg. Sund. Mal. Jav. idem....

1859 MATTHES, *Makassaarsch-Hollandsch woordenboek*, p. 474.

Sky ... *langi langit*.

1833 [THOMSEN], *Vocab. of the Eng., Bugis, and Malay lang.*, p. 2.

Jangi (T. K. N. *langi*), hemel, uitspansel. M. P. *langit*.

1894 KRUYT, *Woordenlijst van de Bareë-taal* [Celebes], p. 28.
Hemels blaauw, *långih bîrûh*.

1860 RIEDEL, *Sangi-Manganitusch woordenlijst*, p. 389.

Hemel | Maba, Gotowassi *langit* | Boeli, Waijamli, Bitjoli *langit* |
Ingli *langat*.

1873 CAMBIER, *Beknopte woordenlijst van talen op Tidoreesch-Halmahera*, p. 1 (265).

The English use of *ailantus* or *ailanthus* began sixty years or more ago.

Ailanthus. An immense tree, a native of the interior of Coromandel.

1832 JAMES ROXBURGH, *Flora Indica* (1874), p. 386.

O'er me let a green *Ailanthus* grow....the Tree of Heaven.

1845 HIRST, *Poems*, 158. (N. E. D.)

Ailantus . . . (*ailanto*, tree of heaven, Sanscrit.) A genus of trees of lofty growth from China and the East Indies: Order, Terebinthaceae.

1847 CRAIG.

Also in 1860 WORCESTER, 1864 WEBSTER, 1884 N. E. D. (where see other quotations), etc.

Ailanthus glandulösus, Desf., called Tree of Heaven,—but whose blossoms, especially the staminate ones, are redolent of anything but "airs from heaven,"—is much planted as a shade tree, especially in towns, and is inclined to spread from seed....(Adv. from China.)

1867 GRAY, *Manual of the botany of the northern United States* (1889), p. 107.

Amuck, frenzied, a homicidal frenzy: the most famous of Malayan words in English, best known in the phrase *to run amuck*. It was formerly speld also *amock*, and is now often speld *amok*, in more exact transliteration of the Malay. At one time the Spanish form *amuco*, Portuguese *amouco*, New Latin **amucus* (plural **amuci*, *amuchi*, *amouchi*), wer in some English use. The second syllable has also become detach't as an independent word, *muck*. See below.

The Malay word is *أمق* *āmuk*, *āmok* (pronounced *ā'muk*, *ā'mok*, or *ā'mu*, *ā'mo*); Lampong *amug*, Javanese *hamuk*, Sundanese *amuk*, Dayak *amok*. It means 'furious, frenzied, raging, attacking with blind frenzy'; as a noun, 'rage, homicidal frenzy, a course of indiscriminate murder'; as a verb, *mengāmuk*, 'to run amuck,' 'to make amok' (Dutch *amok maken*, or *amokken*).

Amòc. Est in vsu. Si quando quis non sanæ mentis, vel omnino desperatus, in interitum se præcipitat. Item significat opprimere, occidere, inuadere, oppugnare, &c.

1631 HAEX, p. 2.

أمق *āmuk*, engaging furiously in battle; attacking with desperate resolution; rushing, in a state of frenzy, to the commission of indiscriminate murder; running a-muck. It is applied to any animal in a state of vicious rage....

1812 MARSDEN, p. 16.

Amuk (J). An a-muck; to run a-muck; to tilt, to run furiously and desperately at every one; to make a furious onset or charge in combat.

1852 CRAWFURD, p. 5.

Amok, woede, razernij, moord in arren moede; Mëngamok, in razende woede alles overhoop loopen of steken (ook van dieren), een verwoeden aanval doen, amok maken, in woede moorden, enz.; Pëng-amok, de persoon die, of het dier, dat amok maakt; het amok-maken, enz.

1895 MAYER, p. 13.

Also 1825 ROORDA VAN EYSINGA, p. 21; 1863 PIJNAPPEL, p. 13; 1869 KLINKERT, p. 13; 1875 FAVRE, 1:108; 1877 WALL and TUUK, 1:105; 1881 SWETTENHAM (1887) 2:3; 1894 CLIFFORD and SWETTENHAM, 1:47; 1893 KLINKERT, p. 42.

'Amoeg, het in razernij rondloopen en zonder aanzien des persoons wonden. 1891 HELFRICH, *Lampongsch-Hollandsche woordenlijst*, p. 72.

Hamoek. A. moord; verwoed blindlings moorden. Amok. *Negoro Botowi harang klëbbën hamoek*, te Batavia ontstaat zelden amok....

1835 ROORDA VAN EYSINGA, *Javaansch en Nederduitsch woordenboek*, p. 135.

... [hamuk] N. K. furieux, un furieux, une attaque furieuse. ... [ngamuk] attaquer avec fureur, attaquer avec courage; courir avec fureur pour tuer tous ceux qui se présentent....

1870 FAVRE, *Dict. javanais-français*, p. 51.

Amuk, to fight furiously, to attack indiscriminately, to smash and destroy. Said of any animal unmanageable from rage....

1862 RIGG, *Dict. of the Sunda lang.*, p. 13.

Amok (zur Verstärkung oft ampur dahinter), wüthender, mörderischer Anfall. Mamok, mamok mampur, wüthend anfallen....

1859 HARDELAND, *Dajacksch-deutsches Wörterbuch*, p. 8.

The corresponding word in Malagasi, *hamu* (*hamou*), means 'drunk'; a recognition of the fact which it took no Solomon to discover: "Luxuriosa res, vinum, et tumultuosa ebrietas" (Vulgate, Prov. 20:1); "strong drink is raging"; or, as in the revised version, "strong drink is a brawler." One who runs amuck is all these. The Malay version is mild. Amok is reserved for stronger occasions. In the Dutch presentation:

'Âjer 'angawr 'itulah penjindir, dân 'arâkh 'itulah penggangguw [water of grape, that (is a) mocker, and arrack, that (is a) brawler].

1821 'Elkitâb, 'ija 'itu, sagala sûrat perdjandjif'an lâma dân bahâruw tersâlin kapada bahâsa Malâjuw, Tjâlsi [Chelsea], p. 754.

The earliest mention of the word in European literature, so far as my quotations show, is in Spanish (c. 1516), where it appears as *amuco*, and is understood to mean the frenzied person himself.

There are some of them [the Javanese] who....go out into the streets, and kill as many persons as they meet....These are called *Amuco*.

c. 1516 BARBOSA, tr. Hakluyt soc. (1866), p. 194. (N. E. D.)

The corresponding Portuguese *amouco* is found :

That all those which were able to bear arms should make themselves *Amoucos*, that is to say, men resolved either to dye, or vanquish.

1663 COGAN, tr. Pinto's *Travels*, l. 199. (N. E. D.)

The Spanish or Portuguese form also appears as New Latin **amucus*, plural **amuci*, found speld *amouki*, *amouchi*.

There are also certaine people called *Amouchi*, otherwise *Chiavi*, which....going forth, kill every man they meete with, till some body (by killing them) make an end of their killing.

1613 PURCHAS, *Pilgrimage*, p. 425.

Those that run these are called *Amouki*, and the doing of it Running a Muck.

1696 OVINGTON, *A voyage to Suratt*, p. 237. (Y. p. 15.)

The word appears in the same sense, 'a frenzied man,' also in an English form, *amock*, *amok*.

To run amock is to get drunk with opium....to sally forth from the house, kill the person or persons supposed to have injured the *Amock*, and any other person that attempts to impede his passage.

1772 COOK, *Voyages* (1790), 1:288. (N. E. D.)

At Batavia, if an officer take one of these *amoks*, or *mohawks*, as they have been called by an easy corruption, his reward is very considerable ; but if he kill them, nothing is added to his usual pay....

1798 S. H. WILCOCKE, tr. Stavrinus, *Voyage to the East Indies*, 1:294. (Y.)

The Malay word having no precise grammatic label as adjective or noun, came into general English with no definit grammatic status, in the phrase "to run amuck," where *amuck*, tho properly a predicate adjective, has been regarded also as an adverb, analogous to "to run *atilt*," "to turn *aside*," etc., and as a noun. See preceding quotations.

Most commonly the word was divided, *a muck*, and taken as an adverbial phrase, with the preposition *a*, which was then sometimes joind to a second syllable with a byphen, to run *a muck*, or *a-muck*; as the adverbial phrase in *to fall a sleep* was written *a-sleep*, now *asleep*. Otherwise the word so divided was taken as a complementary accusativ, the article *a* with its noun *muck*—to run *a muck*, understood as 'to run a course of indiscriminate slaughter.'

Like a raging Indian....he runs *a mucke* (as they cal it there) stabbing every man he meets.

1672 MARVELL, *Rehearsal transposed*, 1:59. (N. E. D.)

And they (the Mohammedans) are hardly restrained from running *a muck* (which is to kill whoever they meet, till they be slain themselves) especially if they have been at Hodge, a Pilgrimage to Mecca.

1698 FRYER, *A new account of East India and Persia*, p. 91. (Y. p. 15. See other quotes. in Y.)

Macassar is the most celebrated place in the East for "running a muck." 1869 WALLACE, *Malay Archipelago* (1890), p. 134.

In fact he enjoyed the reputation of having run *a-mok* through every one of the Ten Commandments, which alone made him interesting.

1896 LOCKER-LAMPSON, *My confidences*. (In *The Athenæum*, April 11, 1896, p. 470.)

From "to run a muck," with *muck* regarded as a noun, came the separate use of *muck* in the sense of 'a course of frenzy.' Dryden is clear on this point. He "runs an *Indian muck*."

Frontless and satire-proof, he scours the streets
And runs an *Indian Muck* at all he meets.

1687 DRYDEN, *The hind and the panther*, l. 2477.

It is not to be controverted that these desperate acts of indiscriminate murder, called by us *mucks*, and by the natives *mongamo* [mengāmoḵ], do actually take place, and frequently too, in some parts of the east (in Java in particular).

1784 MARSDEN, *Hist. of Sumatra*, p. 239. (Y.)

They [the Javans] are little liable to those fits and starts of anger, or those sudden explosions of fury, which appear among northern nations. To this remark have been brought forward as exceptions, those acts of vengeance, proceeding from an irresistible phrenzy, called *mucks*, where the unhappy sufferer aims at indiscriminate destruction, till he himself is killed like a wild beast, whom it is impossible to take alive. It is a mistake, however, to attribute these acts of desperation to the Javans.

1817 RAFFLES, *Hist. of Java*, 1: 250.

The spirit of revenge, with an impatience of restraint, and a repugnance to submit to insult, more or less felt by all the Indian islanders, give rise to those acts of desperate excess which are well known in Europe under the name of *mucks*.... A *muck* means generally an act of desperation, in which the individual or individuals devote their lives, with few or no chances of success, for the gratification of their revenge.The most frequent *mucks*, by far, are those in which the desperado assails indiscriminately friend and foe.

1820 CRAWFORD, *Hist. of the Indian Archipelago*, 1: 66-67.

Amuck, or *amok*, is also found as a noun, 'a course of homicidal frenzy.'

One morning, as we were sitting at breakfast, Mr. Carter's servant informed us that there was an "*Amok*" in the village—in other words, that a man was "running a muck."

1869 WALLACE, *Malay Archipelago* (1890), p. 134.

Hence it is simply said—they made "*amok*." 1869 *Id.*, p. 134.

The tale of the restless dread and suspense which held the whole community, when some mutineer, with the desperate spirit of *amok* in him, was at large, and the exciting efforts to effect and to elude capture, was a chapter which demanded little from the narrator's art to engage

my sympathies and my profound interest in this community, living its chequered life so far from the sympathies of the world.

1885 FORBES, *A naturalist's wanderings in the Eastern Archipelago*, p. 16.

It appears that "the desperate spirit of amok" is utilized sometimes as a social hint at a dance in Sumatra, much as a knife or a revolver at a dance in Kentucky.

His [Master of the Ceremonies] office is both a delicate and a difficult one. He must himself be of good position in the community, and be more or less a general favourite;....for the parents or the relatives of the higher-ranked of the dancers, feeling themselves insulted, have suddenly revenged themselves by *amok*—that mode of retribution which is to them the swiftest and most gratifying.

1885 FORBES, *A naturalist's wanderings in the Eastern Archipelago*, p. 148.

Amok is also used as an English verb, 'to run amuck.' So Dutch *amokken*.

The Magindinao Illanun lashed himself to desperation; flourishing his spear in one hand, and the other on the handle of his sword, he defied those collected about him: he danced his war-dance on the sand: his face became deadly pale: his wild eyes glared: he was ready to *amok*, to die, but not to die alone.

1842 BROOKE, *Journal*, in Mundy, *Narrative of events in Borneo and Celebes* (1848), 1:309.

But hearing nothing for some time, we went out, and found there had been a false alarm, owing to a slave having run away, declaring he would "amok" because his master wanted to sell him.

1869 WALLACE, *Malay Archipelago* (1890), p. 134. [Three more instances, p. 134, 134, 135.]

Babirusa, also speld *babirussa*, and, badly, *babiroussa*, and, worse, *babyrousa*, *babyroussa*, the so-called "hog-deer" of the Malayan islands. New Latin *babirussa*, Sp. *babirusa*.

The Malay name is بابي رُوس *bābī rūsa*, meaning, not as usually translated, according to the order of the words, "hog-deer" or "pig-deer," but, according to Malay syntax, "hog (like) deer," that is "deer-hog": بابي *bābī*, hog, رُوس *rūsa*, deer.

Babbi. Porcus.

1631 HAEX, p. 4.

بابي *bābī* and باب *bāb* a hog, pig; pork. *Bābī ūtan* the wild hog. *Bābī rūsa* an animal of the hog kind with peculiar tusks resembling horns, from whence it is named the hog-deer. (See Valentyn, vol. iii. plate, fig. C.)

1812 MARSDEN, p. 30.

Babi-rusa. The hog deer; literally, "the deer hog," *Babi-rusa alfurus*.

1852 CRAWFURD, p. 14.

بابي *babi*, varken:—oetan, *sus verrucosus*,—tanah, *sus vittatus*,—roesa, hertzwijn, *sus babyrussa*....(Jav. *id.* tam varken. Bat. *id.* Mak. Boeg. *bawoi*. Daj. *bawoi*). 1863 PIJNAPPEL, p. 26.

بابي *bābi*, cochon, porc.... روس—*bābi rūsa*, le sanglier ou cochon-cerf (*sus babi russa*). 1875 FAVRE, 2:166.

Also 1877 WALL and TUUK, 1:178; 1893 KLINKERT, p. 76; 1895 MAYER, p. 27; 1895 CLIFFORD and SWETTENHAM, 2:103. SWETTENHAM 1881 gives only *rūsa bābi* (2:94).

The word *bābi* is in use throughout the Archipelago, in a great variety of forms: Malay بابي *bābi*, Lampong *baboi* (C.), Javanese and Sundanese *babi*, Balinese *bahoi* (C.), Madurese *babi* (C.), Biajuk *bawoi* (C.), Dayak *bawoi*, Macassar *bawoi*, Bugis *bawoi* (C.), Buru *fafu*, Aru and Ke islands *fawoi*, *wawoi*, *waf*, *fef*, Timor *fahi* (C.), Tetu (Timor) *fahi*, Kaladi (Timor) *pahi*, Rotti *bafi* (C.), Tagal (Philippine islands) *babuy*, *baboy*, all 'pig.' The forms mark "C." ar in Crawford's *History*, 1820, 2:144.

Babi, L. zwijn, varken. 1835 ROORDA VAN EYSINGA, *Javaansch en Nederduitsch woordenboek*, p. 3.

... [*babi*] N. cochon, porc.

1870 FAVRE, *Dict. Javanais-français*, p. 518.

Babi, a pig, a hog, a swine.

1862 RIGG, *Dict. of the Sunda Lang.*, p. 29.

Bawoi, Schwein....

1859 HARDELAND, *Dajacksch-deutsches wörterbuch*, p. 60.

Varken. Maleisch *babi*, Wokam *fawoi*, Oedjir *fef*, Eh Ellat *wawoe*, Oorspronk *waf*.

1864 ELJBERGEN, *Korte woordenlijst van de taal der Aroe- en Keij-eilanden*, p. 567.

Babi, *fafoe*.

1874 JELLESMA, *Woordenlijst van de taal der Alfoeren op het eiland Boeroe*, p. 3.

Pig, Kaladi *pahi*, Tetu *fahi* [in Timor].

1866 FORBES, *A naturalist's wanderings in the Eastern Archipelago*, p. 494.

Babirusa appears in English use in the latter part of the seventeenth century.

The head of a *Babiroussa*; it hath two long Tushes on the lower jaw, and on the upper two Horns [the canine teeth] that come out a little above the Teeth and turn up towards the Eyes.

1673 RAY, *Observ. made in a journey through part of the Low Countries*, etc., p. 29. (S. D.)

See other quotations (1696, 1774, 1790) in the Stanford dict. and N. E. D., and references in PENNANT, *Synop. quadrupeds*, 1771, p. 73.

The wild pig seems to be of a species peculiar to the island; but a much more curious animal of this family is the *Babirusa* or Pig-deer, so named by the Malays from its long and slender legs, and curved

tusks resembling horns. This extraordinary creature resembles a pig in general appearance, but it does not dig with its snout, as it feeds on fallen fruits. The tusks of the lower jaw are very long and sharp, but the upper ones instead of growing downwards in the usual way are completely reversed, growing upwards out of bony sockets through the skin on each side of the snout, curving backwards to near the eyes, and in old animals often reaching eight or ten inches in length.

1869 WALLACE, *Malay Archipelago* (1890),

p. 211. (See also p. 213, 202, 299, 300.)

... the region in the S. E. of the Bay of Kajeli, where alone in Buru the singular Hog-deer (the *Babirusa*), which is known elsewhere only in Celebes, was to be found.... This singular animal uses its curious upturned and hooked teeth, the natives told me, to hold to the bottom of ponds by, when hard pressed by hunters.

1885 FORBES, *A naturalist's wanderings in the Eastern Archipelago*, p. 407 (Buru).

Balachan, blachan, also balachong, blachang, blachong, formerly also balachaun, balachoung, ballichang, a fish condiment of a very pronounced nature, the same as the Javanese trassi (*trāsi*).

Malay بلانچ balāchan, bēlāchan, Achinese *belāchan*, Sundanese *balāchang*, also spread into various dialects of Borneo, and other islands.

بلانچ balāchan caviare; small fish, prawns or shrimps, pounded in a mortar, and preserved with spices. Balāchan ikan caviare of fish. Balāchan ūdang kechil, caviare of shrimps.

1812 MARSDEN, p. 44.

بلانچ bēlatjan, toespijs bestaande uit gezouten en dan gestampte en gedroogde vischjes of dergelijke, 't Jav. mal. *trasi*.

1863 PIJNAPPEL, p. 36.

Klinkert is more emphatic :

بلانچ bēlatjan, is geen toespijs, maar een dikke, bruine conserf van kleine vischen of garnalen, waarvan immer iets in de toespijzen, zooals kerrie, sambal, enz. gemengd wordt, om ze aangenaamer van smaak te maken. De stank er van is ondragelijk en het overmatig gebruik veroorzaakt verzwering van neus- en mond-holte.

1869 KLINKERT, p. 36.

بلانچ belāxan, du caviar, petits poissons ou chevrettes séchés au soleil, broyés dans un mortier et formant une conserve que l'on mêle au carry, aux épices etc., pour servir d'assaisonnement au riz. ... Sund. ... *balaxang*.

1875 FAVRE, 2:302.

Also 1825 ROORDA VAN EYSINGA, p. 43; 1852 CRAWFURD, p. 20; 1887 LIM HIONG SENG, 1:57; 1893 KLINKERT, p. 112; 1895 MAYER, p. 42; 1895 CLIFFORD and SWETTENHAM, 2:189, 250.

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1889 LANGEN, *Woordenboek der Atjehsche taal*, p. 37.

Balachang, a superior variety of *Délan* or *Trasi*. It is of a yellowish colour and made of the choice of materials from which *Délan* is made....

1862 RIGG, *Dict. of the Sunda lang.*, p. 34.

Maleisch *belatjan*, *Sampitsch balatjan*, *Katingansch balatjan*, *ka-viaar* (trassie).

1872 TIEDTKE, *Woordenlijst der Sampitsche en Katingansche taal*, p. 12.

The composition is first described by Dampier :

Balachau is a composition of a strong savour, yet a very delightful dish to the natives of this country. To make it, they throw the mixture of shrimps and small fish into a sort of weak pickle, made with salt and water, and put it into a tight earthen vessel or jar. The pickle being thus weak, it keeps not the fish firm and hard, neither is it probably so designed, for the fish are never gutted. Therefore, in a short time they turn all to a mash in the vessel; and when they have lain thus a good while, so that the fish is reduced to a pap, they then draw off the liquor into fresh jars, and preserve it for use. The masht fish that remains behind is called *balachau*, and the liquor poured off is called *nukemum*. The poor people eat the *balachau* with their rice. 'Tis rank scented, yet the taste is not altogether unpleasant, but rather savory, after one is a little used to it. The *nukemum* is of a pale brown colour, inclining to grey, and pretty clear. It is also very savory, and used as a good sauce for fowls, not only by the natives, but also by many Europeans, who esteem it equal with soy.

1697-1709 DAMPIER, *Voyages*, 2:28. (1820 CRAWFURD, *Hist. of the Indian Archipelago*, 1:197.)

There is one mode of preparing and using fish, of so peculiar a nature, but so universally in use, that it is worth a detailed description. This preparation, called by the Malays *blachang*, and by the Javanese *trasi*, is a mass composed of small fish, chiefly prawns, which has been fermented, and then dried in the sun. This fetid preparation, so nauseous to a stranger, is the universal sauce of the Indian islanders, more general than soy with the Japanese. No food is deemed palatable without it.

1820 CRAWFURD, *Hist. of the Indian Archipelago*, 1:197.

Some fish, others manufacture *balachau*; some trust to their net, others to their stakes: and at this season salt is in great demand.

1842 BROOKE, *Journal*, in Mundy's *Narrative of events in Borneo and Celebes* (1848), 1:305.

Then we had a slim repast of soda water and bananas... and the boatmen prepared an elaborate curry for themselves, with salt fish for its basis and for its tastiest condiment *blachang*—a Malay preparation much relished by European lovers of durian and decomposed cheese. It is made by trampling a mass of putrefying prawns and shrimps into a paste with bare feet. This is seasoned with salt. The smell is penetrating and lingering.

1883 BIRD, *Golden Chersonese*, p. 180.

See other quotations, 1784 MARSDEN, *Hist. of Sumatra* (1811), p. 57; 1817 RAFFLES, *Hist. of Java*, 1:98; 1852 CRAWFURD, p. 195.

Banteng, also *banting*, the wild ox of Java, Borneo, and the Malay peninsula, *Bos banteng*.

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بنتڠ *banting* wild koebeest. 1825 ROORDA VAN EYSINGA, p. 52.

Banteng (Jav.). The wild bull and domestic kine of the same stock. 1852 CRAWFURD, p. 16.

بنتڠ *banting* ... III. het roode of lichtbruine runderras van de Padangsche bovenlanden, T. (Jav. *banteng*, en Daj. *banting*, wilde os. *bos sundaicus*). 1863 PIJNAPPEL, p. 41.

بنتڠ [*banting*] ... II. naam eener soort van wild rund. 1877 WALL and TUUK, 1:266-7.

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These are the Javanese and other entries:

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... [*banteng*] N. K. boeuf sauvage.

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Bantèng, the wild cattle, the wild bull. Found among the mountains, or in lonely forests in the Sunda districts. The bulls are handsome animals, sleek and black, with noble horns; the cows are inferior animals, and fawn-coloured. 1862 RIGG, *Dict. of the Sunda lang.*, p. 40.

Bantèng H. van *sampi*. [See SAPI-UTAN.]

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The banteng has his share in English mention:

A wild ox is found in the forest of Java, the same which is found in the peninsula and Borneo, but which is wanting in Sumatra. This is the *banteng* of the Javanese and the *Bos sondaicus* of naturalists. The Dutch naturalists inform us that all attempts to tame it have been vain, as in the case of the buffalo of the American prairies.

1856 CRAWFURD, *Descriptive dict. of the Indian islands*, p. 172.

The most striking proof of such a junction is, that the great *Mammalia* of Java, the rhinoceros, the tiger, and the *Banteng* or wild ox, occur also in Siam and Burmah, and these would certainly not have been introduced by man.

1869 WALLACE, *Malay Archipelago* (1890), p. 92.

Not much less than the rhinoceros is the *banting* or *Bos sundaicus*, to be found in all the uninhabited districts between 2000 and 7000 feet of elevation. 1881 *Encyc. Brit.*, 13:602, s. v. JAVA.

In the forests on the southern slopes of the Malawar and the Wayang [Java], the *banteng* (*Bos banteng*) lived in considerable herds. The full-grown animal has a magnificent head of horns.... No more bellicose and dangerous inhabitant of the forest than a wounded bull need hunter care to encounter.

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See also Bickmore (1869), p. 72; and *Riverside nat. hist.* (1884-1888), 5:321.

Bohon upas, the poison-tree of the East Indies, of which fabulous stories were told, and which thus became a favorite matter of allusion in literature and rhetoric.

The name also appears as *bohun upas* and *bon upas*. The initial *b* is a blunder. The proper form would be **pohon* or **puhun upas*; Malay *پوهن اوڤس* *pōhon* or *pūhun ūpas*, 'tree of poison'. See further under UPAS.

Pūhn ūpas, the poison-tree, arbor toxicaria *Macassariensis*, Thunb. [See full quot. under UPAS.] 1812 MARSDEN, p. 24.

اوڤس *oepas*, I. vergiftig plantensap, plantaardig vergift: *pohon* —, vergiftboom, inzond. *antiaris toxicaria* en *strychnos tieute*, Bëroe-pas. (Jav. —. Mal. *إيفه* *ipoeh*.) 1863 PIJNAPPEL, p. 20.

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The following appears to be the first mention in English of the "Bohon upas":

The following description of the *Bohon Upas*, or Poison Tree, which grows in the Island of Java, and renders it unwholesome by its noxious vapours, has been procured for the *London Magazine*, from Mr. Heydinger, who was employed to translate it from the original Dutch, by the author, Mr. Foersch, who, we are informed, is at present abroad, in the capacity of surgeon on board an English vessel....

'In the year 1774, I was stationed at Batavia, as a surgeon, in the service of the Dutch East India Company. During my residence there I received several different accounts of the *Bohon-Upas*, and the violent effects of its poison.' [Etc., etc.]

1783 *London magazine*, Dec., p. 512-517. (Y. p. 731.)

From the fabulous narrative thus introduced, the *Bohon Upas* and the simple *Upas* soon past into literary and oratoric allusion. See further under UPAS.

C'est au fond des sombres forêts de l'île de Java que la nature a caché le *pohon upas*, l'arbre le plus dangereux du règne végétal, pour le poison mortel qu'il renferme, et plus célèbre encore par les fables dont on l'a rendu le sujet....

1808 (?) *Annales des voyages*, 1:69. (Y.)

tusks resembling horns. This extraordinary creature resembles a pig in general appearance, but it does not dig with its snout, as it feeds on fallen fruits. The tusks of the lower jaw are very long and sharp, but the upper ones instead of growing downwards in the usual way are completely reversed, growing upwards out of bony sockets through the skin on each side of the snout, curving backwards to near the eyes, and in old animals often reaching eight or ten inches in length.

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The most striking proof of such a junction is, that the great Mammalia of Java, the rhinoceros, the tiger, and the *Banteng* or wild ox, occur also in Siam and Burmah, and these would certainly not have been introduced by man.

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Bohon upas, the poison-tree of the East Indies, of which fabulous stories were told, and which thus became a favorite matter of allusion in literature and rhetoric.

The name also appears as *bohun upas* and *bon upas*. The initial *b* is a blunder. The proper form would be **pohon* or **puhun upas*; Malay *پوهن اوڤس* *pōhon* or *pūhun ūpas*, 'tree of poison'. See further under UPAS.

Pūhn ūpas, the poison-tree, arbor toxicaria Macassariensis, Thunb. [See full quot. under UPAS.] 1812 MARSDEN, p. 24.

اوڤس *oepas*, I. vergiftig plantensap, plantaardig vergift: *pohon* —, vergiftboom, inzond. *antiaris toxicaria* en *strychnos tieute*, Bēroe-pas. (Jav. —. Mal. *ايفه ipoeh*.) 1863 PIJNAPPEL, p. 20.

پوهن اوڤس *pōhon ūpas*, arbre dont le suc est un poison (*antiaris toxicaria* et aussi *strychnos tieute*). 1875 FAVRE, 1:31.

The following appears to be the first mention in English of the "Bohon upas":

The following description of the *Bohon Upas*, or Poison Tree, which grows in the Island of Java, and renders it unwholesome by its noxious vapours, has been procured for the *London Magazine*, from Mr. Heydinger, who was employed to translate it from the original Dutch, by the author, Mr. Foersch, who, we are informed, is at present abroad, in the capacity of surgeon on board an English vessel....

'In the year 1774, I was stationed at Batavia, as a surgeon, in the service of the Dutch East India Company. During my residence there I received several different accounts of the *Bohon-Upas*, and the violent effects of its poison.' [Etc., etc.]

1783 *London magazine*, Dec., p. 512-517. (Y. p. 731.)

From the fabulous narrativ thus introduced, the *Bohon Upas* and the simple *Upas* soon past into literary and oratoric allusion. See further under UPAS.

C'est au fond des sombres forêts de l'île de Java que la nature a caché le *pohon upas*, l'arbre le plus dangereux du règne végétal, pour le poison mortel qu'il renferme, et plus célèbre encore par les fables dont on l'a rendu le sujet....

1808 (?) *Annales des voyages*, 1:69. (Y.)

Antiaris, Lesch. *Antiar* or *Antschar*, its Javanese name. Linn. 21, Or. 4, Nat. Or. *Artocarpacææ*. This is the far-famed *Upas* poison-tree of Java—the *Boom* [*Boon F*] or *Bon Upas* of the Javanese.

1840 PAXTON, *Botan. dict.*, ed. Hereman (1868), p. 40.

The name is found used, by error, for the poison itself.

While the juice of some ["of the *Artocarpus* tribe"] is nutritive, that of others is highly poisonous. Thus *Antiaris toxicaria* is the source of the famous poison called *Bohun-Upas*, or *Upas-Antiar*, by the Javanese, and which is said to owe its properties to the presence of *Strychnia*.

1855 BALFOUR, *Manual of botany*, p. 519.

Emerson makes a characteristic use of the *Bohon Upas*; and many other writers mention it.

They [the English] stoutly carry into every nook and corner of the earth their turbulent sense; leaving no lie uncontradicted, no pretension unexamined. They chew hasheesh; cut themselves with poisoned creases; swing their hammock in the boughs of the *Bohon Upas*; taste every poison; buy every secret.

1856 EMERSON, *English traits*, ch. 8. (Wks. 1876, p. 103.)

Bruang, the Malayan bear, *Ursus* or *Helarctos malayanus*, cald also the honey-bear and the sun-bear.

The Malay name is بروغ *brūang*, *brūwang*, *bërūwang*;

Achinese *beruwang*, Batak *baruwang*, Sundanese *bruwang*, *baruang*, Dayak *bahuang*, Sampit (Borneo) *bahuang*, Macassar *baruwang*, Bugis *baruang*. According to Swettenham the word probably stands for **ber-ruang*, from *ber-*, a verbal prefix, and *ruang*, a hole; meaning "the animal which lives in a hollow." Compare *cave-bear*.

Bear (*ursus*) بروغ *brūang*. 1812 MARSDEN (*Eng.-Mal.*), p. 389.

[Not in the Malay-Eng. part.]

بروغ *beroewang* of *broewang* beer.

1825 ROORDA VAN EYSINGA, p. 45.

Bruwang (J.). A bear, *Ursus malayanus* of Horsfield.

1852 CRAWFURD, p. 31.

بروغ *broewang*, de Maleische beer. (Mak. *id.* Bat. een oude beer, die een ronden, witten kring om den snuit heeft.)

1863 PIJNAPPEL, p. 34.

Bruang بروغ a bear. (Derived from *ruang* a hole. *Ber-ruang*, or *bruang* a hole-maker.)

1881 SWETTENHAM (1887), 2:19.

Also 1875 FAVRE, 2:291; 1877 WALL and TUUK, 1:227; 1893 KLINKERT, p. 102; 1895 MAYER, p. 49; 1895 CLIFFORD and SWETTENHAM, 2:221, 273.

بروغ *bëroewang*, de zwarte honigbeer.

1889 LANGEN, *Woordenboek der Atjehsche taal*, p. 33.

Baruang, Poison. The bear of Sumatra and Borneo.

1862 RIGG, *Dict. of the Sunda lang.*, p. 42.

Bruwang, a bear. Not known on Java, except as brought from Sumatra or Borneo as a rarity. *Ursus Malayanus*.

1862 RIGG, *Dict. of the Sunda lang.*, p. 65.

Bahuang, Bär.—*Dengedengen bahuang*, etwas taub (so taub als ein Bär) sein. 1859 HARDELAND, *Dajacksch-deutsches wörterbuch*, p. 30.

Beroewang, Sampitsch *bahoewang*, Katingansch *oenda*, beer.

1872 TIEDTKE, *Woordenlijst der Sampitsche en Katingansche taal*, p. 11.

Bear . . . *buruang bruang*.

1833 [THOMSEN], *Vocab. Eng. Bugis and Malay lang.*, p. 20.

See also RAFFLES, *Hist. of Java* (1817), 2: App. 89.

The English use of the name is recent.

Here is also a small bear (*bruangh*) found elsewhere only in Borneo.

1883 *Encyc. Brit.*, 15: 322, art. MALAY PENINSULA.

The genus *Helarctos*, meaning Sun Bear, strictly embraces but one species, *Helarctos malayanus*. The Malayan Bear or *Bruang*, is confined to the Indo-Malayan sub-region, that is, to the Malayan peninsula and the neighboring islands, Borneo, Sumatra and Java. It is much smaller than the Himalayan bear, not exceeding four feet and a half in length.

1888 *Riverside nat. hist.*, 5: 371.

The *Bruang* has a smallish head and a short neck which is very strong, enabling it to tear up the great plantains When tamed it shows so much affection and has so many droll ways as to make it an amusing and prized pet.

1888 *Id.*, 5: 372.

Bruh, a Malayan monkey, *Macacus nemestrinus*. Malay برو *brū*, *bērū*, also with the weak final -*k*, بروك *bruk*, *bērūk*, بروك *bruk*; Achinese بروك *bērōk*, Balinese *brug*, Sampit and Katingan *beruk*.

بروک *bruk* and برو *brū* a large species of monkey with a tail; an ape.

1812 MARSDEN, p. 39.

بروک *burokh*, eene apensoort gelijk aan een bairaan, met eenen rooden en kleinen staart.

1825 ROORDA VAN EYSINGA, p. 44.

Bruk. Name of a species of ape.

1852 CRAWFURD, p. 31.

برو *berū*, *brū*, v. بروك *berūk*.

1875 FAVRE, 2: 291.

بروک *berūk*, *brūk*, nom d'une espèce de singe (magot, R. V.) (*simius nemestrinus*) (Pij.).... On trouve aussi برو *brū*.

1875 FAVRE, 2: 292.

بروک *beroek*, naam eener soort van apen—de zoogenaamde lampongsche aap; *inuus nemestrinus*....

1877 WALL and TUUK, 1: 222.

Brok بروك a large monkey with a short tail, often trained to gather cocoanuts and duriens.

1881 SWETTENHAM (1887), 2:19. (See also

1895 CLIFFORD and SWETTENHAM, 2:273.)

بروک bērok, naam van een groot soort Lampongsche aap.

1889 LANGEN, *Woordenboek der Atjehsche taal*, p. 33.

B'roeg, ben. van eene thans onbekende aapsoort.

1876 R. VAN ECK, *Balineesch-Hollandsch woordenboek*, p. 198.

Maleisch broek, Sampitsch beroek, Katingansch beroek, zeker soort van aap.

1872 TIEDTKE, *Woordenlijst der Sampitsche en Katingansche taal*, p. 11.

See also RAFFLES, *Hist. of Java* (1817), 2: App. 89.

The bruh is not so well known in English as his brethren the kahau, the siamang, and the orang-utan.

In length of tail *M[acacus] nemestrinus* and *M. rhesus* hold a median position. The former species, remarkable for the length of the legs and the thinness of the short tail, is of the two the more terrestrial. It is a native of the Malay Archipelago, and is the *Bruh* of the Malays. The coat is brownish washed with yellow, the hair on the crown longer, and forming a radiating tuft behind. *M. rhesus* is, on the other hand, a native of India.... The tail is proportionally longer, thicker, and does not have the pig-like twirl of that of the *bruh*.

1884-88 *Riverside nat. hist.*, 5:517.

Cajuput, also *cajeput*, *kajuput*, *kajeput*, *cajaput*, an East Indian tree, and an oil derived from it (and other trees).

Cajuput is more commonly, but less correctly, speld *cajeput*.

Cajeput, pronounced in the dictionaries "kaj'ē-put" or "kaj'e-pūt," that is, *cadzh'i-put*, -pāt, is, like the Portuguese *cajeput*, a copy of the French *cajeput*, a bad form of *cajuput*. *Cajuput* or *kajuput* is an adapted form of *cajuputi*, which is also found: see CAJUPUTI. The *j* is the Dutch spelling of what is in English *y*, and in *cajuputi*, at least, it should be pronounced as *y* (that is, like *j* in *hallelujah*). Webster (1890) gives *cajuput* with an alternative pronunciation rendering *j* as *y*.

(1) *Cajeput* or *Cajeput tree*.

Kayu-putih. The *cajeput* myrtle, *Melaleuca cajuputi*.

1852 CRAWFURD, p. 70.

Prominent for their straight and shapely pillar-like stems stand out the Lakka (*Myristica iners*), the Rasamala (*Liquidambar altingiana*), and the white-stemmed *Kajeput* trees (*Melaleuca leucadendron*), all of them rising with imposing columns, without a branch often for 80 and sometimes 100 feet.

1885 FORBES, *A naturalist's wanderings in the Eastern Archipelago*, p. 74.

The road led over numerous small hills, from the top of which we got many pretty peeps of Haruka and Ceram, through Gum-tree—the famous *Kajuput*—forest and Kussu-grass fields.

1885 *Id.*, p. 296.

(2) *Cajeput oil*, often reduced to *cajeput*. The Malay name is *mīniak kāyu pūti*h. But in Java *kāyu pūti*h is used also as the name of the oil (Rigg).

Cajeput, an oil brought from the East Indies resembling that of cardamoms. 1797 *Encyc. Brit.* (S. D.), p. 186.

The leaf of the smaller [*Cayuputi trees*], [affords] by distillation, the fragrant essential oil which has been used for medical purposes, sometimes internally as a powerful sudorific, but more frequently externally as an useful embrocation, under the ignorant and corrupt denomination of *Cajeput*. 1820 CRAWFURD, *Hist. of the Indian Archipelago*, 1:513.

The leaves of *Melaleuca minor* (*Cajuputi* of some), a native of the Moluccas, yield the volatile oil of *Cajeput*. It is a very liquid oil, of a grass-green colour, having a pungent camphoraceous odour, and capable of dissolving caoutchouc. It is used medicinally as a stimulant and antispasmodic. 1855 BALFOUR, *Manual of botany* (3d ed.), p. 428.

Doors all shut

On hinges oil'd with *cajeput*.

a. 1845 HOOD, *To Mr. Malthus* (N. E. D.).

Its [Kajeli] great items of export are fish....and the famous *Kajuput oil*, distilled by the natives from the leaves of the gum trees (*Melaleuca Kajuputi*) which form a large part of the vegetation of the shores of the Bay. 1885 FORBES, *A naturalist's wanderings in the Eastern Archipelago*, p. 391.

Cajeput. The name of a fragrant essential oil produced especially in Celebes and the neighbouring island of Bourou.... The drug and tree were first described by Rumphius, who died 1693. (See Hanbury and Flückiger, p. 247.) 1886 YULE and BURNELL, *Hobson-Jobson*, p. 109.

Cajuputi, also *cayuputi*, *kayuputi*, an East Indian tree, *Melaleuca leucadendron*, L. So in New Latin, *cajuputi*. Adanson used *caju-puti* as the generic name (1763, *Fam.* ii. 84); see *Index Kewensis* 1:372. *Cajuputi* should be pronounced as it is speld, Romanly cā-yu-pū'ti, not "kaj-joo-pyoo'ty." Spanish *cayaputi*, Dutch *kajoe-poeti*.

The Malay name is *كايو پوتيه* *kāyu pūti*h. It means 'white tree' or 'white wood.' The bark is white, like the bark of the birch. The name appears also in other languages, Javanese and Sundanese *kayu putih*, Macassar *kayu puti*. In Bali *kayu putih*, 'White Tree,' is the name of a village (1876 Eck, p. 80).

... *Kāyū pūti*h a species of tree which yields a medicinal oil, *melaleuca-leucadendra*, L. 1812 MARSDEN, p. 235.

... *Kajoe poetih*, e. s. v. boom, uit welks bladeren de aetherische olie, minjak kajoe poetih, wordt getrokken. 1893 KLINKERT, p. 479.

Also 1852 CRAWFURD, p. 70; 1863 PIJNAPPEL, p. 173; 1875 FAVRE, 1:231.

Kayu-putih, literally—white wood. The tree grows in the Moluccos; and on Java, the words *kayu-putih*, as in Europe, mean the essential oil derived from the tree. It is the *Cajeput* of Europe. *Melaleuca Cajeputi*.

1862 RIGG, *Dict. of the Sunda lang.*, p. 211.

... *Kāyoe poeti*, soort van boom, *Melaleuca Cajuputi*, vooral bekend om zijn olie.

1859 MATTHES, *Makassaarsch-Hollandsch woordenboek*, p. 35.

Kāyu is the general Malay term for 'wood' or 'tree':

Cayou. Lignum.

1631 HÆX, p. 11.

کایو *kāyū* wood, timber; a tree; an idiomatic term used in counting certain substances...

1812 MARSDEN, p. 251.

Kayu (J). Wood, timber; a tree; an idiomatic term in the enumeration of some objects, and equivalent to "a roll" or "piece" in English.

1852 CRAWFORD, p. 70.

Also 1863 PIJNAPPEL, p. 173; 1875 FAVRE, 1:231; 1880 WALL and TUUK, 2:486; 1893 KLINKERT, p. 479; 1895 MAYER, p. 120; etc.

The word is found throughout the Archipelago; Achinese *kayih*, *kayêe*, Batak *hayu*, Lampong *kayu*, Javanese, Sundanese, Balinese *kayu*, Dayak *kayu*, Macassar *kayu*, Bugis *aju*, Sangi-Manganitu *kahuh*, Buru *kau*, Aru *kai*, Kei *kayu*, etc. In many of the eastern isles, as in Bugis, it is found without the initial consonant, *ayo*, *aya*, *ai*, *aai*, *aow*, *ow*, etc. In the Moluccan form *ai*, it has emerged in English use as the unrecognized first element of the word *ailantus*. See *AILANTUS*, where the decapitate Malayan forms are given. The word also appears in the Philippine islands, Spanish *cáhu*, Tagala and Bisaya *kahong*, and in Madagascar, Malagasi *hazu* (*hazou*), and throughout Polynesia, Fiji *kau*, Marquesan *kaau*, *akau*, Tongan *akau*, Tahitian *raau*, Maori *rakau*, etc. (See Tregear, *Maori-Polynesian compar. dict.*, 1891, p. 387-8.)

Kajoe hout *kajih*.

1880 ARRIENS, *Maleisch-Hollandsch-Atjehsche woordenlijst*, p. 45.

کایو *kajée*, hout. 1889 LANGEN, *Woordenboek der Atjehsche taal*, p. 201.

Kajoe, boom, hout....[Many kinds of trees are mentioned].

1891 HELFRICH, *Lampongsch-Hollandsche woordenlijst*, p. 3-4.

... [*kayu*] N. ... [*kajeng*] K. bois, arbre....

1870 FAVRE, *Dict. javanais-français*, p. 163.

Kayu, wood, timber: sometimes used for a tree in general. *Kha* appears to be wood in Burmese. [A fanciful etym. follows.]

1862 RIGG, *Dict. of the Sunda lang.*, p. 211.

Kaju, Holz, Baum ... *Kajuan*, Gehölz (Wald)....

1859 HARDELAND, *Dajacksch-deutsches wörterbuch*, p. 204.

... *kāyoe*, b. *kayoewa*, vnw. *kayoengkoe*, hout....

1869 MATTHES, *Makassaarsch-Hollandsch woordenboek*, p. 35.

Boomstam, m. *kālūh*.

1860 RIEDEL, *Sangi-Manganitusch woordenlijste*, p. 381.

Hout, o. *kālūh*.

1860 *Id.*, p. 389.

Malay شوتہ pūtih is the ordinary word for 'white.' It is found in many languages. I omit quotations.

In English use *cajuputi*, *cayuputi*, *kayuputi* all appear.

A remarkable example of this is afforded in the *Cayuputi* trees (*Melaleuca leucadendron*) of the Indian islands, which are gigantic myrtles. These trees are easily distinguished in the forest by the whiteness of their bark, which has some resemblance in structure and appearance to that of the birch. This white colour gives to the tree its commercial and vulgar name of *Kayu-puti*, which means literally "white wood."

1820 CRAWFURD, *Hist. of the Indian Archipelago*, 1:513.

The far famed *Kayu Putih*.

1842 BROOKE, *Journal*, in Mundy, *Narrative*, etc. (1848), 1:283.

There was a little brush and trees along the beach, and hills inland covered with high grass and *cajuputi* trees—my dread and abhorrence.

1869 WALLACE, *Malay Archipelago* (1890), p. 295.

Next day we took a westward course through fields of tall Kussu grass dotted with *Kayu-puti* trees, and through swamps full of sago palms.

1885 FORBES, *A naturalist's wanderings in the Eastern Archipelago*, p. 394 (Buru).

So *cajuputi-oil*, *cayu-puti oil*, *kayu-puti oil*.

Cayu-puti oil.

1820 CRAWFURD, *Hist. of the Indian Archipelago*, 3:413, 414.

Rattans from Borneo, sandal-wood and bees'-wax from Flores and Timor, tripang from the Gulf of Carpentaria, *cajuputi-oil* from Bouru, wild nutmegs and mussoi-bark from New Guinea, are all to be found in the stores of the Chinese and Bugis merchants of Macassar.

1869 WALLACE, *Malay Archipelago* (1890), p. 309.

Kayu-puti oil.

1869 BICKMORE, *Travels in the East Indian Archipelago*, p. 249.

Campong, also *kampong*, a Malayan village, a district or quarter of a city, an inclosure; the source of the Anglo-Indian term COMPOUND, which see.

Malay كمش kampung, kampung, 'an inclosure, district, village,' (see quotations); also adjectiv, 'collected, assembled, inclosed'; with verb formativ, 'to assemble'; Batak *tampung*, Lampong *kampung*, Javanese *kampong*, Sundanese *kampung*, Dayak *kampong*, Macassar *kampong*, Tagal *kampon*, 'an inclosure,' etc.; Malagasi *kambound*, 'inclosed.'

Campon. Coniunctio, vel conuentus. Hinc viciniae, & parua loca, campon etiam appellatur.

1631 HÆX, p. 11.

كمش kampung an inclosure, a place surrounded with a paling; a fenced or fortified village; a quarter, district, or suburb of a city; a collection of buildings. . . .

1812 MARSDEN, p. 267.

كَمْبُڠ kampong, eene buurt of menigte huizen, die alle door eenen algemeenen of ieder derzelve door eenen bijzonderen heining omgeven wordt. Eene wijk, buurt of kwartier in eene stad. Een omheind stuk land, eene befloten plaats, afheining; buurt, wijk....

1825 ROORDA VAN EYSINGA, p. 320.

Also 1852 CRAWFURD, p. 66; 1863 PIJNAPPEL, p. 182; 1875 FAVRE, 1: 345; 1880 WALL and TUUK, 2: 543; 1881 SWETTENHAM (1887), 2: 45; 1893 KLINKERT, p. 539.

Kampoeng, I. erf, wijk, aanplant; II. vereeniging van gezinnen (soembaj). 1891 HELFRICH, *Lampongsch-Hollandsche woordenlijst*, p. 2.

Kampung, a village; is properly Malay....

1862 RIGG, *Dict. of the Sunda lang.*, p. 194.

Harde land does not give a Dayak *kampung*, 'an inclosure,' but he gives the adjectiv *kampeng* 'closed,' 'obstructed' (as a door, a river, and figuratively, the heart or mind), with numerous derivatives.

Kampeng, versperst [etc.].

1859 HARDELAND, *Dajacksch-deutsches wörterbuch*, p. 222.

... *kampung*, Mal. een kampong, een omheinde plaats.

1859 MATTHES, *Makassaarsch-Hollandsch woordenboek*, p. 7.

In Malagasi the word (*kambounä*) has only the original sense 'collected,' 'enclosed' (1896 MIRRE, p. 32).

Campong, *kampong* is common in English books of Eastern travel.

His *campong* was at Singi.

1844 BROOKE, *Journal*, in Mundy, *Narrative*, etc. (1848), 1: 371.

I obtained the use of a good-sized house in the *Campong* Sirani (or Christian village). 1869 WALLACE, *Malay Archipelago* (1890), p. 256.

Like all the cities and larger settlements in the Dutch possessions, Amboina is divided into a native *kampung* or quarter, a Chinese *kampong*, and a quarter where foreigners reside.

1869 BICKMORE, *Travels in the East Indian Archipelago*, p. 132.

There are Malay *campongs* (villages) scattered over the island, made up of a few rude bamboo huts, and two or three clusters of fruit-trees.

1875 THOMSON, *The Straits of Malacca, Indo-China, and China*, p. 18.

All islands are liable to the linguistic difficulty of their littoral being occupied by a superior seafaring and commercial race, either continuously or in detached "campongs," while the interior and unexplored mountains become the refuge of shy and uncivilized indigenes.

1878 CUST, *Sketch of the mod. languages of the East Indies*, p. 132.

The great coco-groves are by no means solitary, for they contain the *campongs*, or small raised villages of the Malays.... In the neighborhood of Malacca these *kampongs* are scattered through the perpetual twilight of the forest....

1883 MISS BIRD, *The Golden Chersonese*, p. 137.

[Kampong also on pp. 139, 140, 296, 319, etc.]

In addition to the true natives of the town [Telok-betong in Sumatra], there was a large *campong* of Chinese, a few Arabs, with a considerable fluctuating population of traders from Borneo and Celebes, and other islands of the Archipelago.

1885 FORBES, *A naturalist's wanderings in the Eastern Archipelago*, p. 126. (Kampong, p. 197.)

Cassowary, a large bird related to the emu and the ostrich. This name came into English use early in the seventeenth century, and went through various spellings, *cassowary* (1673), *cassunariway* (1611), *cassowaraway* (1630), *cassiovary* (1690), *cassuary*, also with a Latinized termination *cassowaris* (1705), and sometimes *cassoware* (1651), and (as a poetic truncation) *cassowar* (1800 Southey); also in other languages, French *casoar*, Spanish *casuáres* (1705 Stevens), *casobar*, *casoar* (1878 Dominquez), *casuel* ("cassiovary, large bird of prey" 1879 Meadows), Portuguese *casuar* (Michaelis), Italian *casuario*, Dutch *casuaris*, *kasuaris*, German *cossebàres* (1672 in Yule), *kasuaris* (1682 in Yule), *casuar*, *kasuar* (1848); Swedish and Danish *kasuar*, Russian *kazuará*, New Latin *casoar* (1631 Bontius), *casuarius*.

The word *cassowary* has been generally referred to a Malayan origin, but the statements have been more or less inexact. Bontius (1631) says the bird, which he calls *emu*, is "vulgo Casoar," that is, as he implies, the native name in Ceram is *casoar*. Other statements follow; see forms and dates cited. From these earlier European mentions, the native name has been variously inferred and stated.

Worcester (1860) gives Malay *cassowaris*. "Webster" (1864) gives "Hindust. *kassowaris*." Littré (1877) gives Malay *cassowaris*. Skeat (1879) quotes Littré for *kassowaris*. Yule (1886) gives Malay *kasavāri* or *kasuāri*. The earlier forms cited as nominal English, Spanish, German, or Dutch, or of course all intended to reflect the Malayan name.

The correct European reflex would be *casuvari*, *casuari*, or *kasuvari*, *kasuari*. The Malay word is *كسوارى kasuwāri*, less exactly transliterated *kasuāri*. But it is worthy of note that no Malay dictionary records the word until the year 1863. No form *kasuwāri* or one like it appears in Marsden (1812) or in Roorda van Eysinga (1825). Nor is *kasuwāri* in Crawford (1852). The first entry of *kasuwāri* in a Malay dictionary appears to be in Pijnappel (1863), where it is not given in alphabetic place, but is mentioned as an earlier form of *suwāri* (*soewari*). In Macassar the word is recorded, as *kasuwāri*, in 1859.

سوارى soewari, de casuaris (van een vorm kasoewari).

1863 PIJNAPPEL, p. 143.

Klinkert, in his Supplement to Pijnappel (1869), takes no notice of either form.

The next dictionary entry, like Pijnappel's, is indirect, in the name *pōhon kasuāri*, 'cassowary tree' (1864-5 Van Ekris). See under CASUARINA. Then there are entries in 1875 Favre, 1880 Wall and Tuuk, 1895 Mayer.

کسوارى kasuwāri, kasuāri, le casoar (*struthio casuarius*).
 کسوارى اداله بارغ kasuāri, il y avait des
 casoars (H. Ab. 74). [No cognate forms cited.] 1875 FAVRE, 1:382.

خسوار [chasoewāri] of soewāri, kasuaris (vogel).
 1880 WALL and TUUK, 2:78.

کسواری kasoewari, de casuaris. 1893 KLINKERT, p. 522.

Kasoewari, casuaris. 1895 MAYER, p. 126.

... kasoewāri, bep. kasoewariya, Casuaris.

1859 MATTHES, *Makassaarsch-Hollandsch woordenboek*, p. 66.

Beside the name kasuwāri, there is an other name suwāri, first mentiond so far as the quotations show, by Crawford, 1852. This appears also in Pijnappel 1863 (soewari), in Favre 1875 (suāri), and Wall 1880 (soewāri); and it is also recorded in Macassar (1859), as *sowāri*.

The two forms kasuwāri and suwāri are no doubt connected. Compare kapūyū and pūyū, a quail; lingking and kelingking, a fruit, the lichi. The office of the apparent prefix ka- is not clear. It does not seem to be the prefix ka- as used in connection with the suffix -an, to form certain verbal nouns or participles.

Suwāri appears in most of the dictionaries from Crawford (1852) down:

Suwari. The cassowary or emeu, *Struthio cassuarius*.

1852 CRAWFURD, p. 178.

Cassiowary, Suwari.

1852 CRAWFURD, *Eng. and Malay dict.*, p. 25.

سواری soewari, de casuaris (van een vorm kasoewari).

1863 PIJNAPPEL, p. 143.

سواری suāri = کسوارى kasuāri.

1875 FAVRE, 2:640.

سواری soewāri, z. chasoewāri.

1880 WALL and TUUK, 2:296.

سواری soewari, zie kasoewari.

1893 KLINKERT, p. 406. [Not in 1895 Mayer.]

... sowāri, = kasoewāri, casuaris.

1859 MATTHES, *Makassaarsch-Hollandsch woordenboek*, p. 608.

The bird is mentiond, under a name now current as *emu*, in the following passage:

In Banda and other Ilands, the bird called *Emia* or *Eme*, is admirable. It is foure foot high, somewhat resembling an Ostrich, but hauing three clawes on the feet, and the same exceeding strong: it hath two wings rather to helpe it running, then seruiceable for flight: the legges great and long.

1613 PURCHAS, *Pilgrimage*, p. 430.

The first English mention of the name *cassowary* appears to refer to a bird brought to England:

St. James his Ginny Hens, the *Cassawarway* moreover. (Note by *Coryat*. An East Indian bird at St. James in the keeping of Mr. Walker, that will carry no coales, but eat them as whot you will.)

1611 PEACHAM, in *Paneg. verses* on *Coryat's Crudities*, sig. l. 3^{ro} (1776). (S. D.)

A *Cassawaries* or *Emeus* Egg.

1673 J. RAY, *Journ. Low Countr.*, p. 28. (S. D.)

(See other quotations in S. D. and N. E. D.)

The *Cassawaris* is about the bigness of a large Virginia Turkey. His head is the same as a Turkey's; and he has a long stiff hairy Beard upon his Breast before, like a Turkey.

1705 FUNNEL, in *Dampier's Voyages*, 4:266 (1729). (Y.)

Cassawary, or *Emeu*, a large Fowl, with Feathers resembling Camels-Hair.

1708 and 1715 KERSEY.

Another large and extraordinary bird is the *Cassowary*, which inhabits the island of Ceram only. It is a stout and strong bird, standing five or six feet high, and covered with long coarse black hair-like feathers. The head is ornamented with a large horny casque or helmet, and the bare skin of the neck is conspicuous with bright blue and red colours. The wings are quite absent, and are replaced by a group of horny black spines like blunt porcupine quills.... This bird is the helmeted *cassowary* (*Casuarus galeatus*) of naturalists, and was for a long time the only species known.

1869 WALLACE, *Malay Archipelago* (1890) p. 305.

See also 1774 GOLDSMITH, *Hist. of the earth* (1790), 5:6, p. 67, 73 (Jodrell); 1856 CRAWFURD, *Descriptive dict.*, p. 84; 1869 BICKMORE, *Travels in the East Indian Archipelago*, p. 150; 1889 WALLACE, *Darwinism*, p. 115.

The unreflecting voracity of the bird appears in the quotation in which he eats coals "as whot as you will." In the "experience," or at least in the travels, of a warlike German, quoted by Yule (1644-1659) he, the cassowary, swallowd 50 bullets, of a size not stated. According to a popular rime, the cassowaries of Timbuctoo, which ar ignored by the leading ornithologists, make light of a still heavier diet:

If I were a *cassowary*,
Far away in Timbuctoo,
I would eat a missionary,
Hat and boots and hymn-book, too.

a. 1880 *Auctor incert.*, loc. non cit.

Casuarina, an East Indian and Australian tree.

It is an Anglicized form of New Latin *casuarina* (Linnaeus, *Amoen. Acad.*, 1759, iv. 143, cited in *Index Kewensis*, 1893, 1: 457; Adanson, *Fam.* ii. 481, 1763, cited l. c.), a genus of trees of which many species are named.

This appears to be based on a Malayan name associating the tree with the cassowary. In Van Ekris 1864 the Malay name *pōhon kasuāri* 'cassowary tree' is given as the synonym of several names of the tree in the Amboina region,—*laweur*, *laweur*, *hueur*, *kweule*, *leahua*. An other Malay name is *رڤڤڤ ڤڤڤ ڤڤڤ* (1893 Klinkert, p. 14). In Barē (central Celebes) the tree is named *ogu*.

Laweur, zekere boom (pohon kasuari) (P.)—*laweur* (H. W. K.)—*hueur* (T. R.)—*kweule* (A.)—*leahua* (Kr.).

1864-65 A. VAN EKRIJS, *Woordenlijst.... Ambonsche eilanden*, p. 107.

Ogū (T. *ogū*), *casuarisboom*.

1894 KRUYS, *Woordenlijst van de Barē-taal*, p. 47.

Casuarina, kas-u-a-rin'a, s. (from the supposed likeness of the branches to the plumes of the Cassowary). A genus of plants, constituting the type and only genus of the order Casuarinaceæ.

1847 CRAIG.

The *Casuarinas* [in Timor], especially, remind the observer of the Australian vegetation.

1856 CRAWFORD, *Dict. of the Indian islands*, p. 433.

Surrounding Elie House, near Colombo, in which I resided, were a number of tall *casuarinas* and India-rubber trees, whose branches almost touched the lattices of the window of the room in which I usually sat. These were the favorite resort of the tree-snakes, and in the early morning the numbers which clung to them were sometimes quite remarkable.

1861 TENNENT, *Sketches of the nat. hist. of Ceylon*, p. 305.

It was lovely in the white moonlight with the curving shadows of palms on the dewy grass, the grace of the drooping *casuarinas*, the shining water, and the long drift of surf.

1883 BIRD, *The Golden Chersonese*, p. 275.

Cockatoo, an East Indian parrot. The word has had many forms in English, *cockatoo*, *cokatoe*, *kokatu*, *kakatou*, *cockatooa*, and corruptly *cockatoon*, *cocadore*, *crocadore*, *jacatoo*, etc. Other European forms are French *cacatoès*, *kakatoès*, *cacatois*, Spanish *cacatua*, Portuguese *cacatou*, Dutch *kakatoe*, *kaketoe*, *kakato*, German *kakadu*, Swedish *kakadu*, *cacatu*, etc.

The Malay word is *ككڤو* *kakatūwa*, *kakatūa*, *ككڤو* *kakatūwā*, *ككڤو* *kakatūha*; Javanese *kokotrwo*, Achinese *kakaturua*, Sundanese *kakaturua*; in the Amboina region *lakatua*, or without the terminal syllables, *laka*, *laki*, *taa*, also with only the terminal syllables, reduplicated, *tau-tau*.

The name is imitativ of the parrot's utterance. This is indicated not only by the common belief (see the English quotations dated 1662, 1705, and 1884-8), but by the 'dialectal' forms, and by the existence of other similar imitativ names for parrots, as Malay ككي *kekē*, كيكك *kēkek*, Sunda *ēkēk*, a parroquet, Bugis *chakōlek*, a cockatoo, Maori *kaka*, a parrot, *kakapo*, the owl-parrot.

An other notion is that the bird derives its name from the Malay *kakatūwa*, 'a vise or grip'; but this is obviously a transfer from the name of the bird, in allusion to the grip of its claws or its beak. Compare *crane*, *crow*, *cock*, *goose*, English names of implements transferd from names of birds.

Wall and Tuuk declare that *kakatūwa*, which they write also in a form corresponding to *kakatūha*, is a compound of *kāka* and *tūha* (*tūah*), meaning, I suppose, 'old brother' or 'deeply colored brother'! This is not convincing.

ككتوا *kakatoewā* een vogel van de papagaaiensoort.

1825 ROORDA VAN EYSINGA, p. 314.

Kakatuwah. A cockatoo.

1852 CRAWFURD, p. 65.

ككتوا *kakatoea*, *kakatoe*.

1863 PIJNAPPEL, p. 179.

ككتو *kakatūwa*, *kakatūa*, le kakatoes, oiseau du genre perroquet. . . . Sund. . . . *kakatuwa*.

1875 FAVRE, 1:302.

ككتو I. *kakatōha* en *kakatōwa*, of *kakatōwa* en *kakatōwa* ^[sic]—smst. van *kāka* en *tōha* enz.—naam eener soort van grooten, witten papagaai, *kakatoe*, *kaketoe*. II. *kakatōwa* en *kaka tōwah*, batav., nijptang en *kaketoe*.—B.

1880 WALL and TUUK, 2:524.

Kakah tua....kakahtua.

1887 LIM HIONG SENG, *Manual of the Malay colloquial*, p. 128, 149.

Also 1881 SWETTENHAM (1887) 2:44; 1893 KLINKERT, p. 526; 1895 MAYER, p. 120.

The name appears in Sundanese *kakatuwa*, Achinese *kakatuwa*, *kakaktua*. In the Amboina islands it is *lakatua*, *laka*, *laki*, *laa*, and *tautau*.

Kakatuwa, a cockatoo; used as applied to parrots imported from countries beyond Java, as the parrots of the Moluccos.

1862 RIGG, *Dict. of the Sunda lang.*, p. 187.

ككتوا *kakatoewa*, een groote witte papagaai.

1889 LANGEN, *Woordenboek der Atjehsche taal*, p. 208.

Laka, witte *kakatoea* (R. Kr.)—*lakatua* (T. H. W. K. P.)—*tau* † [= *tautau*] (P.)—*laki* (A.)—*laa* (Ht.).

1864-65 A. VAN EKRIS, *Woordenlijst....Ambonsche eilanden*. p. 104.

The cockatoo entered English, according to the first quotation, with an evil reputation and a worse etymology.

Sparrowes, Robbins, Herons, (white and beautifull) *Cacatoes* (Birds like Parrots, fierce, and indomitable: and may properly be so called from the Greeke *Kakdu* *λέον* proceeding from an euill egge).

1634 SIR T. HERBERT, *Travels*, p. 212. (S. D., p. 254.)

Some rarities of naturall things, but nothing extraordinary save the skin of a jaccall, a rarely colour'd *jacatoo* or prodigious parrot....

1654 EVELYN, *Diary*, July 11. (Y., p. 175.)

An infinite number of Parrots, whereof there are several kinds.... Some are all white, or of a Pearl colour, having on their Crowns a tuft of Feathers of a Carnation red, and they are called *Kahatou*, from that word which in their chattering they pronounce very distinctly.

1662 J. DAVIES, tr. Mandelslo (1669), 1:26. (S. D.)

The *Crockadore* is a Bird of various Sizes, some being as big as a Hen, and others no bigger than a Pidgeon. They are in all Parts exactly of the shape of a Parrot. . . . When they fly wild up and down the Woods they will call *Crockadore*, *Crockadore*; for which reason they go by that name. 1705 FUNNEL, in Dampier, *Voyages*, 4:265-6. (Y. p. 174.)

See other quotations in Yule and S. D., 1638, 1698, 1719, 1750, 1775; also 1840 BROOKE (1848), 1:53.

Small white cockatoos were abundant, and their loud screams, conspicuous white colour, and pretty yellow crests, rendered them a very important feature in the landscape. This [Lombok] is the most western point on the globe where any of the family are to be found.

1869 WALLACE, *Malay Archipelago* (1890), p. 119, 120.

Cockatoos [in the Aru islands]. [Their habits described at length.]

1869 WALLACE, *Id.* (1890), p. 341-343.

The true cockatoos belong to the genus *Cacatua* or *Ptilotophus*. With two exceptions, the fifteen species are white.... They make very interesting pets, crying now "cockatoo," now "pretty cocky," or screaming with a voice far from musical.

1884-88 *Riverside nat. hist.*, 4:353-354.

Compound, an inclosure, a yard.

This is an Anglo-Indian sophistication of the Anglo-Indian *campong*, representing the Malay word *kampung*, *kam-pung*, in early mention (1631 Haex) also written *campon*. The sophistication is like that which appears in *godown*, sometimes, *godon*, for *godong*, *gadong*, a Malayan word which is excluded from this paper as being of Indian origin. The other proposed etymologies of *compound* (see Yule, p. 186-8) are not tenable. For the Malay form, see under *CAMPONG*, which is now established in English use.

It is a curious coincidence that the Malay word which means literally 'brought together,' 'assembled,' has acquired an English form which assimilates it to a word which means 'put together.'

There [at Pollicull near Madapollam] the Dutch have a Factory of a large *Compoude*, where they dye much blew cloth, having above 300 jars set in the ground for that work; also they make many of their best paintings there.

1679 *Fort St. George Consns.* (on Tour), April 14. In *Notes and extracts*, Madras, 1871. (Y., p. 782.)

The houses [at Madras] are usually surrounded by a field or *compound*, with a few trees or shrubs, but it is with incredible pains that flowers or fruit are raised.

1812 MARIA GRAHAM, *Journal of a residence in India*, p. 124. (Y.)

See other quotations (1696, 1772, 1781, 1783, etc.) in Yule, p. 186, 782.

At the entrance to the Rajah's *compound*....I was startled by suddenly coming on a tall pole with a fringed triangle near its summit.

1885 FORBES, *A naturalist's wanderings in the Eastern Archipelago*, p. 472-473.

Coracora, a Malayan galley. Also *kora-kora* (1869 Wallace), *corocoro* (1774 Forrest) (= G. *korrekorre* 1659, in Yule); also (2) *caracora* (as New Latin, 1606, 1613), (3) *caracore* (1784), (4) *caracole*, *caracolle* (1622 Cocks, 1606 Middleton), and *karkollen* (a mere Dutch spelling) (1613 Purchas); (5) *caracoa* (from Spanish *caracoa*). The most correct form is *coracora*, derived, through the Portuguese *coracora*, *corocora*, from the Malay كور kōra-kōra or كورور kora-kōra, kura-kūra, Macassar kōrra-kōrra, a kind of galley (see the quotations).

....Kōra-kōra, a large rowing boat or prau used by the people of the eastern islands. (See plates in Forrest's *Voyage to N. Guinea*.)

1812 MARSDEN, p. 273.

Kura-kura. Name of a large kind of sailing vessel.

1852 CRAWFURD, p. 82.

کور koera.... II. koera-koera, soort van oorlogspiraauwen in de Molukken. (Liever kōra-kōra. Port. *carraca*?)

1863 PIJNAPPEL, p. 186.

کور ou mieux كورور kura-kūra et kora-kōra, nom de certains prahus de guerre dans les îles Moluques. Ce mot vient prob. du Port. *caraca*, une caraque. Mak. . . . *kora-kora*. 1875 FAVRE, 1:294.

Also 1880 WALL and TUUK, 2:561; 1893 KLINKERT, p. 554.

....1° kōra.... 2° kōrra-kōrra, bep. kōrra-korrāya, soort van vaartuigen, vroeger, vooral bij de honggi-togten in de Molukko's gebruikt.

1859 MATTHES, *Makassaarsch-Hollandsch woordenboek*, p. 43.

The origin of the Malay kōra-kōra or kura-kūra has been variously stated.

(1) In one view it is a transferd use of the Malay كور kūra-kūra, also كور ku-kūra, a tortoise. The allusion would be,

one would suppose, either to the pace or to the shape; but the vessel is described as a "barque à marche rapide" (see quotation 1882 under CARACOA below), and nothing is said of its likeness in shape to a tortoise. It would seem more likely that the tortoise was named from the boat; but the words appear to be independent. The word for the tortoise is mentioned in all the dictionaries.

(2) In an other view the Malay *kōra-kōra*, *kura-kūra*, a vessel, is from the Arabic قرقور *qurqūr*, *qorqūr*, *kurkūr*, plural *qurāqūr*, *karākūr*, a large merchant vessel.

قرقور *qurqūr*, pl. *qurāqūr*, large long ship.

1884 STEINGASS, *Arabic-Eng. dict.*, p. 832.

According to Arabic scholars, this Arabic term is not native, but was borrowed at an early date, from the Greek κέρκυρα (whence Lat. *cercūrus*, *cercyrus*), a kind of vessel invented by the Cyprians. The Greek name itself is perhaps ultimately of Semitic origin (18.. Fraenkel, *Fremdwörter*, p. 217; 1895 Lewy, *Die semitischen fremdwörter im Griechischen*, p. 152). The Arabic word, in the plural *qurāqūr*, is asserted, by most writers, to be the source of the Romance word, Spanish *carraca*, Italian *caracca*, French *caraque*, whence the English *carrack*, *carrick* of the sixteenth and seventeenth centuries; but this view is without warrant.

In the absence of proof to the contrary, we may assume *kōra-kōra* to be native Malay.

I give the English and other European quotations in the order of the five forms above discriminated.

(1) *Coracora*, *kora-kora*, *corocoro*.

A *corocoro* is a vessel generally fitted with outriggers, having a high arched stem and stern, like the points of a half moon.... The Dutch have fleets of them at Amboyna, which they employ as guardacostas.

1774 FORREST, *Voyage to New Guinea*, 23. (Y. p. 122.)

The boat was one of the kind called "*Kora-kora*," quite open, very low, and about four tons burthen. It had outriggers of bamboo about five feet off each side, which supported a bamboo platform extending the whole length of the vessel. On the extreme outside of this sat the twenty rowers, while within was a convenient passage fore and aft. The middle portion of the boat was covered with a thatch-house, in which baggage and passengers are stowed; the gunwale was not more than a foot above water, and from the great top and side weight, and general clumsiness, these boats are dangerous in heavy weather, and are not unfrequently lost.

1869 WALLACE, *Malay Archipelago* (1890), p. 266.

I add two French statements:

"The Malay *kora-kora* is a great row-boat; still in use in the Moluccas. Many measure 100 feet long and 10 wide. Some have as many as 90 rowers."

18.. tr. MARRE, *Kata-Kata Malayou*, 87. (Y.)

Le sculpture des *korokoros* malais . . . annonce autant d'intelligence que de goût. 18. . RIENZI, *Océanie*, 1:84. (Devic, p. 84.)

(2) *Caracora*:

. . . Nave consensâ, quam linguâ patriâ *caracora* nuncupant. Navi-gii genus est oblongum; et angustum, triremis instar, velis simul et remis impellitur. 1606 JARRIC, *Thesaurus*, 1:192. (Y.)

They exercise Sea-fights in their *Caracoræ*, or Galeots, with great Dexteritie. 1613 PURCHAS, *Pilgrimage*, p. 453.

(3) *Caracore*:

Caracores are light vessels used by the natives of Borneo....and by the Dutch as guarda costas in those latitudes.

1794 *Rigging and seamanship*, 1:240. (N. E. D.)

(4) *Caracole*, *caracolle* (*karkollen*).

The foremost of these Galleys or *Caracolles* recovered our Shippe, wherein was the King of Tarnata.

1606 *Last East-Indian voyage to Bantam and the Maluco islands*, E 2. (Y. p. 122.)

They haue [in Amboina] Gallies after their manner, formed like Dragons, which they row very fwiftly: they call them *Karkollen*.

1613 PURCHAS, *Pilgrimage*, p. 453.

7 or 8 *carecoles* (or boates). 1622 R. COCKS, *Diary* (1883), 1:279. (S.D.)

(5) *Caracoa*.

Caracoa is a Spanish form, a modification of the Malay *kōrakōra*.

Caracóa, a fort of large Indian Boat.

1706 STEVENS, *Spanish and Eng. dict.*

Les Phillipines nomment ces batimens *caracoas*. C'est vne espèce de petite galère à rames et à voiles.

1711 in *Lettres édifiantes et curieuses* (1780-83), 4:27. (Y.)

Caracoa (la).—Barque à marche rapide qui se construit principale-ment dans le Sud de l'archipel.

1882 BLUMENTRITT, *Vocab. de l'espagnol des Phillippines*, tr. Hugot (1884), p. 22.

Yule enters *caracoa* as a nominal English word, but I hav found no true English examples. *Caracoa* occurs 17 times in one of the Hakluyt society's publications, an edition, publisht in 1855, of "The last East-Indian voyage" (1606), but there is no telling whether *caracoa* occurs even once in the original (a quota-tion with *caracolles* is given above, from Yule). The editor indeed says that in editing the text, he has brutally mutilated the orthography, has starcht and ironed the punctuation, and has destroyd the proper names, substituting other names out of his own head. His exact words ar:

In editing the text, I have modernized the orthography and punctuation, and have restored the proper names to uniformity.

1855 ———, *The voyage of Sir Henry Middleton to Bantam and the Maluco islands* (Hakluyt soc. 1855), Advertisement, p. viii.

And in a note to his first mention of *caracoa* in the text, he says:

The word occurs near twenty times, and is variously spelt. I have given it the Spanish form. 1855 *Id.*, p. 34, note.

Yet there is no statement in the preface or on the title-page that the text was intended for kindergarten use.

Cuscus, an East Indian opossum. Sometimes Frenchified *couscous*; Dutch *coescoes*, F. *couscous*, N. L. *cuscus*; from Malay كوسكس *kuskus* كوسكس *kūskus*, in Amboina *kusu*, in Manado *kusé*, in Timor *kui*.

كوسكس *kūskus* an animal of the opossum tribe; *didelphis orientalis*. (See Valentyn, vol. iii., p. 272, and pl. fig. D.) 1812 MARSDEN, p. 274.

Kuskus. Name of a didelphine animal, *Didelphis orientalis*.

1852 CRAWFORD, p. 83.

كوسكس *koeskoes*, soort van buideldier, didelphys, in de Molukken.

1863 PIJNAPPEL, p. 178.

كوسكس *kuskus*, nom d'un animal de la famille des marsupiaux (didelphe), dans les Moluques.

1875 FAVRE, 1:382.

Koei. T[imor], een buideldier, coescoes. (A[mbon] *koesoe*; M[anado] *koesé*.)

1876 CLERQ, *Het Maleisch der Molukken*, p. 28.

Cuscus was made familiar in English by Wallace and Forbes, but it is found earlier.

Cuscus maculatus.... This species, which is named *Coescoes* at the Moluccas, according to Valentyn, varies much in its colouring. At Wagiou....the natives call it *Schamscham*.

1839 Penny *Cyclo.*, 14:460a.

The naked-tailed and strictly prehensile *Couscous* of the Moluccas.

1839 *Id.*, 460b.

Just as we had cleared away and packed up for the night, a strange beast was brought, which had been shot by the natives. It resembled in size, and in its white woolly covering, a small fat lamb, but had short legs, hand-like feet with large claws, and a long prehensile tail. It was a *Cuscus* (*C. maculatus*), one of the curious marsupial animals of the Papuan region. 1869 WALLACE, *Malay Archipelago* (1890), p. 350.

[Also mentioned on pp. 104, 223, 301 and 324.]

The Marsupial species of *Cuscus* [italics in original] also, of which we have obtained three species, have interested us. They are very plenti-

ful, and at this season [May 21] the females all seem to have a little one in their pouch. One of these was a tiny creature about two inches long, quite hidden in its pouch, fixed by its lips formed into a simple round orifice to its mother's teat. They are much eaten by the natives, by whom they are caught in nooses set in the trees, or by artifice. In moonlight nights creeping stealthily to the foot of a tree where they have observed one sleeping, taking care not to lift their heads so that the light flash in their eyes, they imitate at short intervals its cry, by placing the fingers in the nose; the *Cuscus* descends, and is fallen on by the watchers below. The python is their greatest enemy, and devours large numbers of them as they cling to the branches during the day in a semi-torpid condition.

1885 FORBES, *A naturalist's wanderings in the Eastern Archipelago*, pp. 291, 292. [Amboina.]

Dugong, a large sirenian of the Eastern seas, *Halicornes dugong*, also known in two other species, *H. tabernaculi*, of the Red Sea, and *H. australis*, of the Australian waters. It is allied to the American manatee.

The form *dugong* follows the French and New Latin *dugong* of Cuvier, *dugon* of Buffon, a blunder for *duyong*. The Malay word is ديوغ *dūyong*, *dūyung*, ديوغ *dūyōng*; Achinese *duyun*, Javanese *duyung*, Macassar *ruyung*, Bugis *rujung*, Amboina *rukun*. In Bugis the name is applied to the dolphin.

ديوغ *dūyōng* a very large sea-animal of the order of mammalia, vulgarly called the sea-cow, and by naturalists, the *dugong* (from the Malayan word), which has given occasion to the stories of mermaids in the tropical seas.

1812 MARSDEN, p. 133.

ديوغ *doejōng* een groot zeedier, gewoonlijk de zeekoe genaamd. Humba pōn ter-kedjut-lah me-lichat doejōng jang amat befar doedokh di pantej, ik verschrikte op het zien van eene zeer groote zeekoe, welke op het strand zat.

1825 ROORDA VAN EYSINGA, p. 165.

Duyung (J). The lamantin or dugong. 1852 CRAWFURD, p. 45.

ديوغ *doejoeng*, eene soort van zeekoe, halicornes doejong. Běrdoejoeng-doejoeng, waggelen als eene zeekoe. (Jav. *doejoeng*. Mak. *roejoeng*. Boeg. *roedjoeng*.)

1863 PIJNAPPEL, p. 113.

ديوغ *dūyung*, nom d'un animal marin (vache marine M. Pij.). Jav. *duyung*. Mak. *ruyung* et Bug. *rujung* dauphin.

1875 FAYRE, 1:859.

Also 1880 WALL and TUUK, 2:126; 1893 KLINKERT, p. 312; 1895 MAYER, p. 90.

Lōloemba zeekoe. Doejoen zeevarken.

1879 DIAS, *Lijst van Atjehsche woorden*, p. 159.

[These entries should be transposed, as to the Dutch words.]

دوجون *doejoen*, de zeekoe.

1889 LANGEN, *Woordenboek der Atjehsche taal*, p. 114.

Halicone *dajong* [sic] *doejong*.

1891 VORDERMAN, *Bijdrage tot de kennis van het Billiton-Maleisch*, p. 392.

In Macassar it is *rāyung*, and its tears hav the property of calling the ladies' attention to one's merits :

... *roeyoeng*, soort van dolfijn, Boegin *roedjoeng*, idem. De tranen van dezen visch opgevangen, en daaraan het vermogen toegeschreven, om het hart eener schoone aan zich te verbinden.

1859 MATTHES, *Makassaarsch-Hollandsch woordenboek*, p. 453.

Rukun, zekere visch (Ml. *doejong*) (T. R. Kr.)

1864-65 A. VAN EKRIS, *Woordenlijst*
... *Ambonsche eilanden*, p. 336.

In the first English mention of the animal which I hav noted, the name is not given :

They haue no Kine, but a Fifth of like lineaments, which they take in their Nets.

1613 PURCHAS, *Pilgrimage*, p. 436.

Pennant calls it the "Indian walrus" :

Indian [Walrus]. Le *Dugon* de Buffon . . . W[alrus] with two short canine teeth, or tufks, placed in the upper jaw . . . [etc.] . . . It is said by one [traveller], that it goes upon land to feed on the green mofs, and that it is called in the Philippines, the *Dugung*.* [Note : *De Buffon xiii. 377, the note.] 1771 PENNANT, *Synopsis of quadrupeds*, p. 338.

It was probably aquatic, like the *Dugong* and *Manatee*.

1845 C. DARWIN, *Journ. Beagle*, ch. 5 : p. 82. (S. D., p. 339.)

Dugong. The *Halicore dugong* of naturalists is an inhabitant of the shallow seas of the Archipelago, but it is not numerous, or at least is not often caught by the fishermen. It is the *duyong* of the Malays, which naturalists mistaking a *j* or *y* for a *g*, have corrupted into *dugong*. During my residence in Singapore, a few were taken in the neighboring shallow seas, and I can testify that the flesh of this herbivorous mammifer is greatly superior to that of the green turtle.

1856 CRAWFURD, *Descriptive dict. of the Indian islands*, p. 125.

Tennent mentions the *dugong* as frequenting the shores of Ceylon, and discourses pleasantly of the mermaid myths for which the *dugong* is supposed to be responsible. He quotes Megasthenes, Aelian, and Valentyn.

Of this family, one of the most remarkable animals on the coast is the *dugong*, a phytophagous cetacean, numbers of which are attracted to the inlets, from the bay of Calpentyn to Adam's Bridge, by the still water, and the abundance of marine algæ in these parts of the gulf. . . .

1861 TENNENT, *Sketches of the nat. hist. of Ceylon*, p. 68. (See the whole account, p. 68-73.)

The mermaid, of the genus *Halicore*, connects the inhabitants of the land and water. This *Duyong*, described as a creature seven or eight feet long, with a head like that of an elephant deprived of its proboscis, and the body and tail of a fish, frequents the Sumatran and Malayan shores, and its flesh is held in great estimation at the tables of sultans and rajahs.

1883 BIRD, *The Golden Chersonese*, p. 9.

Once the *dugongs* were very numerous. The early traveller, Leguat, tells of seeing schools of several hundred, grazing like sheep on the seaweeds a few fathoms deep, in the Mascarin islands. The flesh is regarded as a special delicacy, and the Malay king claims, as royal property, all that are taken in his domains. The flesh of the young is compared to pork, beef, and veal; but the old *dugongs* are tougher and not so highly prized.

1884-88 *Riverside nat. hist.*, 5:211.

See also 1869 BICKMORE, p. 244; 1883 *Encyc. Brit.*, 15:390; 1885 FORBES, p. 313; 1886 YULE, p. 254.

Durian, a rich East Indian fruit; also the tree on which it grows, *Durio zibethinus*. Also speld *durion*, *durien*, *durean*, *dorian*, *duroyen*; Dutch *doerian*, French *dourian*, Italian *duriano* (c. 1440), Middle Latin *durianus* (c. 1440), N. L. *durio*(n); representing Malay *دريڤان* *durian*, literally 'thorny (fruit)' formed with the suffix *-an*, from *دوري* *dūri*, a thorn, spine. The fruit has a thick rind set with short stout spines. It is in Achinese *durian*, *dëriën*, Lampong *deriyan*, Javanese *duren*, Amboina *torian*, *tolian*, *turen*, *tureno*, *torane*.

دريڤان *durian* a rich fruit much prized by the natives, but to which the European palate does not readily accommodate itself; *durio zibethinus*, L. It takes its name from its prickly coat. (Vid. *دوري* *dūri*).

1812 MARSDEN, p. 132.

دوري *dūri* a thorn, spine, prickly.... *دريڤان* *durī-an* a fruit (so called from its prickly coat), *durio zibethinus*, L. 1812 MARSDEN, p. 137.

دريڤان *doeriejan* eene groote vrucht waarvan de pitten gegeten en door de inboorlingen voor zeer aangenaam gehouden worden, hebbende eenen onaangenaamen geur, die voor vele Europeërs onverdragelijk is.

1825 ROORDA VAN EYSINGA, p. 157.

دوري *dūri*, épine, piquant, pointe.... *دريڤان* *durī-an*, nom d'un fruit ainsi nommé parce qu'il est hérissé d'épines, le *durian* (*durio zibethinus*).... *هنتو* — *durī-an hantu*, *داون* — *durī-an dāun*, deux espèces de *dourian*. Jav. . . *ri*, épine, . . . *durén*, le *dourian*. Bat. . . *durī*, épine.

1875 FAVRE, 1:864-5.

. . . *Doerifjan* (gew. uitspraak *dërriyan*), naam eener, voor velen, inz. Europeanen, walgelijke, doch door de ind. volken hooggeschatte

vrucht—*durio zibethinus*; de boom; soorten: d. dāoen; d. teng-gājoen; d. tēmbāga, met geel vleesch.

1880 WALL and TUUK, 2:122.

Also 1852 CRAWFURD, p. 43; 1863 PIJNAPPEL, p. 112; 1881 SWETTENHAM (1887), 2:29; 1893 KLINKERT, p. 299, 310; 1895 MAYER, p. 91.

Doerian, *doerian*. 1879 DIAS, *Lijst van Atjehsche woorden*, p. 154.

دیرین *dēriēn*, de *doerian*vrucht.

1889 LANGEN, *Woordenboek der Atjehsche taal*, p. 110.

Dērijan, *doerian*.

1891 HELFRICH, *Lampongsch-Hollandsche woordenlijst*, p. 59.

... [*duren*] (nom d'un fruit épineux) le *dourian* malais.

1870 FAVRE, *Dict. javanais-français*, p. 176.

Doerēn naam van de bekende *doerian*-vrucht.

1876 R. VAN ECK, *Balineesch-Hollandsch woordenboek*, p. 82.

Turen, zekere boomvrucht (Ml. *durian*) (T. R. Kr. H. W.)—*torian* (K.)—*tolian* (P.)—*tureno* (Ht. N.)—*lorane* (A.).

1864-65 A. VAN EKRIS, *Woordenlijst...*

Ambonsche eilanden, p. 128.

See also RAFFLES, *Hist. of Java* (1817), 2: app. 100.

The *durian* is mentioned by Italian writers as early as the middle of the fifteenth century. See Yule.

The English mentions begin in the latter end of the sixteenth century, and, as usual, in translations of Spanish and Dutch writers.

There is one that is called in the Malacca tongue *durion*, and is so good that I have heard it affirmed by manie that have gone about the worlde, that it doth excede in savour all others that ever they had seene or tasted.... Some do say that have seene it that it seemeth to be that wherewith Adam did transgresse, being carried away by the singular savour.

1588 PARKE, tr. Mendoza, *Historie of the great and mightie kingdom of China* (etc.), (Hakluyt soc., 1853) 2:318. (Y. p. 256.)

See other quotations 1598, 1662, 1665, 1727, 1855, 1878, in YULE and S. D.

The highest rank among the indigenous fruits, in the opinion of the natives, is given to the *Durian* (*Durio Zibethinus*), not at all excepting even the *Mangustin*, but most of strangers, from its peculiar and offensive odour, have at first a violent aversion to it.

1820 CRAWFURD, *Hist. of the Indian Archipelago*, 1:419.

The *Mangosteen*, *Lansat*, *Rambutan*, *Jack*, *Jambou*, and *Blimbing*, are all abundant; but most abundant and most esteemed is the *Durian*, a fruit about which very little is known in England, but which both by natives and Europeans in the Malay Archipelago is reckoned superior to all others.

1869 WALLACE, *Malay Archipelago* (1890), p. 56.

The *Durian* grows on a large and lofty forest tree, somewhat resembling an elm in its general character, but with a more smooth and

scaly bark. The fruit is round or slightly oval, about the size of a large cocoanut, of a green colour, and covered all over with short stout spines, the bases of which touch each other, and are consequently somewhat hexagonal, while the points are very strong and sharp. It is so completely armed, that if the stalk is broken off it is a difficult matter to lift one from the ground. The outer rind is so thick and tough, that from whatever height it may fall it is never broken.

1869 *Id.*, p. 57.

If I had to fix on two only, as representing the perfection of the two classes, I should certainly choose the *Durian* and the *Orange* as the king and queen of fruits.

1869 *Id.*, p. 58. (Also p. 41, 107, 236.)

From Muara-Rupit I proceeded to Surulangun, along a good road following the Rawas river, under a continuous shade of tall *Durian trees* from thirty-five to forty feet high—a growth of ten years. The road was carpeted throughout its length with their flowers, which were dropping off in vast numbers. In the flowering time it was a most pleasant shady road; but later in the season the chance of a fruit now and then descending on one's head would be less agreeable.

1885 FORBES, *A naturalist's wanderings in the Eastern Archipelago*, p. 240.

Mr. Wallace draws from the fall of the durian an uncomplacent moral:

Poets and moralists, judging from our English trees and fruits, have thought that small fruits always grow on lofty trees, so that their fall should be harmless to man, while the large ones trailed on the ground. Two of the largest and heaviest fruits known, however, the Brazil-nut fruit (*Bertholletia*) and *Durian*, grow on lofty forest trees, from which they fall as soon as ripe, and often wound or kill the native inhabitants. From this we may learn two things: first, not to draw general conclusions from a very partial view of nature; and secondly, that trees and fruits, no less than the varied productions of the animal kingdom, do not appear to be organized with exclusive reference to the use and convenience of man.

1869 WALLACE, *Malay Archipelago* (1890), p. 58.

But perhaps the falling durian and Brazil-nut are a crude effort of Nature, looking toward an extinction of savagery. If the savages would not dodge! So ineffectual are the "intentions" of Nature. The weighted fruits of the tropics and the stones of the towers of Siloam continue to fall, upon the just and the unjust. When gravity dispenses justice, the just must dodge, or be crushed.

Gecko, a sprightly lizard of interesting nature and domestic habits. Also spelt *gecco*, *gekko*; French *gecko*, German *gecko*, Dutch *gekko*.

Malay **گېڪو** *gēkoḵ* (Favre), *gekko* (Pijnappel), *gekko* (Marsden 1812, who says he has not found the Malayan orthog-

raphy). The final ق *q* is faint, and is omitted in the European form, as it was in *abada* for *bada*, Malay بادق *bādaq*, and as it is in *bruḥ* from Malay *brū* for *bruḥ*, in *Ava* for *Awak*, in *Batta* for *Bataḥ*, and so on. See *ABADA* and *BRUH*.

The Malay ثيكي *gōkoḥ* is one of several different Malay names for the same animal, all within a small area of variation, and all evidently of an imitativ nature, suggestiv of the creature's peculiar cry. The other forms are *kēku*, *kēkuh*, *kōko*, *gaguh*, *gagoh*, *gago*, *gōkō*, *kōkō*, *tōkō*, *také*, *takeḥ*; in Lampong *gēgag*, Katingan (Borneo) *keké*.

Tōkō, *také*, *takeḥ*, are reflected in an occasional English form *TOKAY*. From one of these forms, or from an Indian or other name of similar form because of imitativ nature, were drawn two forms which appear in English use of the eighteenth century, *chacco* and *jacco*.

ثيكي *gaguh* a large species of house-lizard which makes a very loud and peculiar noise; (also named *kēku*, *gekko*, *gago*, *gōkō*, and *tōkō*).

1812 MARSDEN, p. 286.

Lizard . . . (great, noisy, house-) ثيكي *gaguh*. (It, or other species nearly like it, is also named *kēkuh*, *gekko*, *gago*, *gōkō*, and *tōkō*, the Malayan orthography of which words has not occurred.)

1812 MARSDEN, p. 483.

گوكي *gokej*, (*gekko*) *huishaagdis die een bijzonder geluid geeft*.

1825 ROORDA VAN EYSINGA, p. 345.

گوكي *gagoh*, een groote *huishaagdis*, die om deszelfs geluid *kéjko*, *gekko*, *gago*, *gōkej* en *tōkej* genoemd wordt.

1825 *Id.*, p. 339.

تيكي *gekōk*, bijnaam van de *tokei*, om het geluid dat zij maakt.

1863 PLJNAPPEL, p. 202.

تيكي *gekōk*, klanknaabootsend woord, door de Europeanen gebruikt om het beest aan te duiden, dat in 't MAL. en JAV. *tēkek* heet. Een *hagedis*, die aldus roept.

1869 KLINKERT, p. 219.

تيكي *gēkoḥ*, le *gecko*, petit lézard ainsi nommé par imitation de son cri. On le nomme aussi en Mal. توكي *tōke*.

1875 FAVRE, 1:402.

The form *gōke* is also well established.

گوكي *goké*, *koké*, and *toké* [read *ō* in each form] a species of lizard that haunts old buildings, and makes a loud and peculiar noise.

(Vid. ثيكي *gaguh*.)

1812 MARSDEN, p. 292.

گوكي *gokej*, (*gekko*) *huishaagdis die een bijzonder geluid geeft*.

1825 ROORDA VAN EYSINGA, p. 345.

Goke. A name for the *tokay*, or noisy lizard; v. *Tākeh* [read *Tākek*].

1852 CRAWFURD, p. 51.

توكي tōke, gōke, bat[aksch] (bal[ineesch] toeké, T.), groote hagedis, gekko. (B.) 1877 WALL and TUUK, 1:425.

توكي gōke, z. tōko [read tōke]. 1884 WALL and TUUK, 3:40.

The form *keké* appears in the Bornean dialect of Katingan:

Maleisch *tjitjak*, Sampitsch *tasakh*, Katingansch *kèké*, hagedis.

1872 TIEDTKE, *Woordenlijst der Sampitsche en Katingansche taal*, p. 27.

Maleisch *tjitjak*, Sampitsch *tasakh*, Katingansch *djonjoe kèké*, hagedis. 1872 *Id.*, p. 29.

In the Lampong language it is *gëgag*.

Gëgag, gekko.

1891 HELFRICH, *Proeve van een Lampongsch-Hollandsche woordenlijst*, p. 16.

An other name for this lizard, or some of its varieties is جيهك *chīchah* or جيهك *chīchak*, or چچك *chěchak*, Achinese *chichak*, Javanese *chěchak*, Balinese *chěchěk*, Sundanese *chakchak*, Lampong *kichuk*, probably also imitativ. There are similar Indian names. In Marathi *chukchūk* is the cry of the lizard (1847 Molesworth, p. 409). In quotations below (1864, 1883), the Indian gecko says "*chuck, chuck, chuck*," in an other (1861), "*chic, chic, chit*."

The gecko became known first as a venomous and malicious creature. The later accounts make it a harmless, cheerful little reptil, with interesting habits, as the quotations show:

Of all animals the *gekko* is the most notorious for its powers of mischief; yet we are told by those who load it with that calumny, that it is very friendly to man; and, though supplied with the most deadly virulence, is yet never known to bite.

1774 GOLDSMITH, *Hist. of the earth* (1790), 7:142 (in Jodrell, 1820).

Tennent gives an interesting account of the geckoes of Ceylon:

The most familiar and attractive of the lizard class are the *Geckoes*, that frequent the sitting-rooms, and being furnished with pads to each toe, they are enabled to ascend perpendicular walls and adhere to glass and ceilings. Being nocturnal in their habits, the pupil of the eye, instead of being circular as in the diurnal species, is linear and vertical like that of the cat. As soon as evening arrives, the *geckoes* are to be seen in every house in keen and crafty pursuit of their prey; emerging from the chinks and recesses where they conceal themselves during the day, to search for insects that then retire to settle for the night. In a boudoir where the ladies of my family spent their evenings, one of these familiar and amusing little creatures had its hiding-place behind a gilt picture frame. Punctually as the candles were lighted, it made its appearance on the wall to be fed with its accustomed crumbs; and

if neglected, it reiterated it[s] sharp, quick call of *chic, chic, chit*, till attended to. . . . 1861 TENNENT, *Sketches of nat. hist. of Ceylon*, p. 231-2.

We saw several sorts of lizards, of which the only dangerous one was that called by the Egyptians *Gecko*.

1792 HERON, tr. Niebuhr, *Travels through Arabia and other countries in the East*, 2: 332.

[That in the Arabic of Egypt this lizard is called *Gecko* is asserted only by Heron, not by Niebuhr; and is apparently an error due to a misunderstanding of Forskål, *Descript. Animalium*, 1775, p. 13. ED.]

Gekko, n. A species of salamander. [With quot. from Goldsmith 1774, above.] 1820 JODRELL, *Philology on (sic) the English language*.

[Marked with a star, as a new entry. I find no earlier dictionary entry.]

The *Gecko* occasionally utters a curious cry, which has been compared to that peculiar clucking sound employed by riders to stimulate their horses, and in some species the cry is very distinct, and said to resemble the word "Geck-o," the last syllable being given smartly and sharply. On account of this cry, the Geckos are variously called Spitters, Postilions and Claquers.

18 . . WOOD, *New illustrated nat. hist.*, p. 504.

(See also *Riverside nat. hist.* (1885), 3: 406.)

This was one of those little house lizards called *geckos*, which have pellets at the end of their toes. They are not repulsive brutes like the garden lizard, and I am always on good terms with them. They have full liberty to make use of my house, for which they seem grateful, and say *chuck, chuck, chuck*.

1883 *Tribes on my frontier*, p. 38. (Y. p. 280.)

The form *chacco* apparently arose from some Indian reflection of the Malayan name, or from a confusion with the other name *chichak* (compare Sundanese *chakchak*).

Chaccos, as Cuckoos, receive their Names from the Noise they make. They are much like Lizards but larger.

1711 LOCKYER, *An account of the trade in India*, p. 84. (Y. p. 280.)

Jacco, found but once, and then speld *jackoa*, appears to be an other phase of *chacco*.

They have one dangerous little Animal called a *Jackoa*, in shape almost like a Lizard. It is very malicious . . . and wherever the Liquor lights on an Animal Body, it presently cankers the Flesh.

1727 A. HAMILTON, *A new account of the East Indies*, 2: 131. (Y. p. 280.)

Gingham, a cotton fabric woven of dyed yarn, in stripes, checks, and other figures.

The origin of this word has been much debated, and has remaind undetermind. It has been derived from *Guingamp*, a town in France where ginghamms were alleged to be made; from an unidentified North Indian *ginghām*; from a Tamil word, *kindan*; and from a Javanese word *ginggang*, to which no etymologic sense, or a wrong one, has been assigned. It has even been sought in Egypt; and in the air.

The word is Malayan; it is found in Malay, Achinese, Lampong, Javanese, Sundanese, Balinese, Macassar, in the precise sense of 'gingham.' Its etymologic meaning is 'striped.' It is probably original in Javanese.

The European forms are English *gingham*, *ghingham*, French *guingan* (1770), *guingamp*, Sp. *guinga*, *guingon*, Port. *guingão* (1602), It. *gingano* (c. 1567), *ghingano* (18 . .), *guingano* (1796), also *gingamo* (from Eng.), Dutch *gingam* (from Eng.), *gingas*, *gingang*, *ginggang*, Ger. Dan. Sw. *gingang*.

It is in Malay *گنگڠ* *ginggang*, Achinese *ginggang*, Lampong *ginggang*, Javanese *ginggang*, Sundanese *ginggang*, Balinese *gènggang*, Dayak *ginggang*, *gènggang*, Macassar *ginggang*, a striped or checkerd cotton fabric known to Europeans in the east as 'gingham.' As an adjectiv, the word means, both in Malay and in Javanese, where it seems to be original, 'striped.' The full expression is *kāin ginggang*, 'striped cloth' (Grashuis).

The Tamil "*kindan*, a kind of coarse cotton cloth striped or checquered" (quoted in Yule) can not be the source of the European forms, nor, I think, of the Malayan forms. It must be an independent word, or a perversion of the Malayan term.

گنگڠ *ginggang*, soort van stof, *gingang*. 1863 PIJNAPPEL, p. 195.

گنگڠ *ginggang*, geruit hessen- of kielenggoed. Op R[iouw] tjele
doch *ginggang* wordt ook verstaan. (Jav. id.)

1869 KLINKERT, p. 212.
گنگڠ *ginggang*, nom d'une sorte d'étoffe, du *guingamp*. (Jav. et Sund. . . *ginggang*. Mak. . . *ginggang*.) 1875 FAVRE, 1:424.

Gingas, *gingan*, o. eene oostersche stof, *kain ginggang*.

1878 ROORDA VAN EYSINGA, ed. Grashuis, p. 259.

گنگڠ *ginggang*, zekere gestreepte stoffe, *ginggang*.

1884 WALL and TUUK, 3:18.

Ginggang, *plang*, rayée, striped.

1882 BIKKERS, *Malay, Achinese, Fr. and Eng. vocab.*, p. 33.

Ginggang, gestreept, b. n. (als stoffen). 1884 BADINGS, p. 264.

گنگڠ *ginggang*, e. s. v. gestreepte stof, geruit of gestreept kielenggoed, = tjele. 1893 KLINKERT, p. 579.

چيلي tjele, e. s. v. geruit lijnwaad, = *ginggang*.

1893 KLINKERT, p. 281.

Ginggang, geestreept, geruit, gestreepte stof. 1895 MAYER, p. 106.

The forms outside of Malay are entered as follows :

گینگڠ *ginggang*, geruit goed.

1889 LANGEN, *Woordenboek der Atjehsche taal*, p. 232.

Ginggang, geruit goed. 1891 HELFRICH, *Lampongsch-H. w'lijst*, p. 18.

Ginggang, A. gestreept. 1835 ROORDA VAN EYSINGA, *Jav. etc.*, p. 107.

... [*ginggang*] N. K. s'écarter; chanceler. (aussi, nom d'une sorte de toile), guingamp. 1870 FAVRE, *Dict. javanais-français*, p. 486.

"*Ginggang*, a sort of striped or chequered East Indian *linwand*."

1876 JANSZ, *Jav. dict.* (Tr. in Y.)

Ginggang, Gingham, a variety of coloured cloth with pattern in stripes. 1862 RIGG, *Dict. of the Sunda lang.*, p. 131.

Gènggang ben. van eene kainstof.

1876 R. VAN ECK, *Balinesch-Hollandsch woordenboek*, p. 190.

Gènggang, i. q. *ginggang*. [But *ginggang* has been accidentally omitted.] 1859 HARDELAND, *Dajacksch-deutsches wörterbuch*, p. 132.

... *ginggang*, soort van gestreept, of ook wel geruit Oost-Indisch lijnwaad, *ginggang*. Mal. en Jav. idem.

1859 MATTHES, *Makassaarsch-Hollandsch woordenboek*, p. 68.

In the Spanish of the Philippine Islands it is *guingon*.

Guingon (el).—Espèce d'étoffe de coton, ordinairement bleue.

1882 BLUMENTRITT, p. 38.

European mentions of gingham begin about the middle of the sixteenth century. Italian, Portuguese and Dutch instances are given by Yule. The English use begins with the seventeenth century.

Captain Cock is of opinion that the *ginghams* both white and browne, which yow sent will prove a good commodity in the Kinge of Shashmahis cuntry, who is a Kinge of certaine of the most westermost ilandes of Japon . . . and hath conquered the ilandes called the Leques.

1615 Letter app. to Cock's *Diary*, 2:272. (Y.)

The trade of Fort St. David's consists in longcloths of different colours, sallamporees, morees, dimities, *ginghams*, and saccotoons.

1781 CARRACCIOLI, *Life of Clive*, 1:5. (Y.)

Even the *gingham* waistcoats, which striped or plain have so long stood their ground, must, I hear, ultimately give way to the stronger kerseymere.

1793 HUGH BOYD, *Indian Observer*, 77. (Y.)

Gingham. A kind of striped cotton cloth.

1828 WEBSTER, *Amer. dict. of the Eng. lang.*

Such is the simple form in which the word appears, for the first time, in an English dictionary; but now ginghams of all sorts constitute a part of the happiness of millions of English and American homes. Let me make the ginghams of a nation, and I care not who writes its songs.

[For the rest of this article, see volume xviii.]

PROCEEDINGS
OF THE
AMERICAN ORIENTAL SOCIETY,
AT ITS
MEETING IN ANDOVER, MASSACHUSETTS,

April 9th, 10th, and 11th, 1896.

THE Society assembled at Andover, in Bartlet Chapel of Andover Theological Seminary, on Thursday of Easter Week, April 9th, at 3 P. M., and was called to order by its President, President Daniel Coit Gilman, of the Johns Hopkins University.

The following members were in attendance at one or more of the sessions :

Atkinson	Hicks	Moore, G. F.	Torrey
Brooks, Miss	Hopkins	Orne	Toy
Dickerman	Jackson	Robinson, G. L.	Ward, W. H.
Dike	Kellner	Ropes	Webb
Gilman	Lanman	Scott	Wilcox
Gottheil	Lyon	Skinner	Winalow
Haupt	Macdonald	Taylor	Wright, T. F.
Hazard	Merrill	Thayer	[Total, 31.]

Professor John Phelps Taylor, of Andover, for the Committee of Arrangements, presented a report in the form of a printed program. The opening of the sessions was thereby set for half past nine o'clock mornings and for three o'clock afternoons. Professor Taylor extended to the Society an invitation from Professor George Harris, for Thursday evening from eight to nine, to meet at his house the Faculty of the Theological Seminary and the Teachers in Phillips Academy; and also an invitation from Professor Moore for Thursday and Friday evenings. The report was adopted and the invitations accepted with the thanks of the Society. The business session was deferred to Friday morning; and the presentation of papers was begun. The President appointed as a Committee to nominate officers for the ensuing year Professors Moore, Haupt, and Gottheil. At five o'clock the session was adjourned.

The second session began at 9.30 Friday morning, President Gilman in the chair. The first hour or two were devoted to matters of business. The minutes of the last meeting, at New Haven, Conn., April 18th and 19th, 1895, were approved as printed.* Reports of outgoing officers were then in order.

The Corresponding Secretary, Professor Lanman, of Harvard University, laid before the Society some of the correspondence of the year.

This included letters of regret from the Bishop of Cairo, from Professors I. H. Hall and Henry Preserved Smith, and from Mr. Witton.—From S. E. Peal, Rajmai P. O., Sibsagor, Assam, came a letter stating that he was at work upon the languages of the Naga Hills, and asking for a certain publication of our Society thereupon by Rev. Nathan Brown, a missionary of the American Baptist Union in Assam. It is pleasant to state that Mr. Van Name was able to send Mr. Peal more than he asked for, namely vol. iv. as well as vol. ii. of our Journal, since both contained pertinent material. "Its value to us here," says Mr. Peal, "is much greater than you might suppose. Dr. B. was a real *genius*."—The Venerable Subhūti, a Buddhist High Priest, of Waskaduwa, Ceylon, whose kind offices were mentioned in our last Proceedings (see Journal, vol. xvi., page cciv), in response to Professor Lanman's request for the transcript of a Singalese manuscript of a Pāli text, replies in a most obliging and efficient way.—Mr. Charles Johnston, of Ballykilbeg, County Down, of the Bengal Civil Service, retired, sends a dainty little volume of translations from the Upanishads (Dublin, Whaley); and with it, the welcome announcement that he has translated into English Deussen's "System des Vedānta." This translation is to run through the "Calcutta Review" and is then to appear in book-form.—Dr. Burgess of Edinburgh reports satisfactory progress upon his portfolios of collotype plates of ancient monuments in India to be issued by Griggs of London.—Professor Leumann of Strassburg writes about his Jaina studies, especially about his elaborate work on Śilāṅka and the Āvaśyaka literature and the biography of Haribhadra.—Professor Bühler sends from Vienna a copy of vol. ii. of the "Sources of Indian Lexicography," published by the Austrian Academy, and dedicated to Weber and to the memory of Whitney; and writes of the progress of the "Grundriss der indischen Philologie," and expresses the hope that nearly a third part of the whole will be issued before the end of 1896.—A recent

* The omission of the reading and of the approval of the Recording Secretary's minutes is at variance with the usage of the Society and the advisability of the innovation is questionable. These minutes are intended to give a full and precise record of the actual doings of the sessions and to give them in their actual order. The printed "Proceedings," on the other hand, contain only such matters as it seems worth while to publish; but they do not constitute so full and sufficient a record as it may well prove desirable to have. May it not become a matter of regret if the control of the Recording Secretary's record is allowed to lapse?

letter, bearing the signature, still clear and firm, of our oldest Honorary Member, Böhrlingk (he was elected in 1844), pleasantly attests the unexhausted vitality of our Sanskrit Nestor.—Professor Weber sends some of the documents (among them, the address of the Berlin Academy and that of the Philosophical Faculty) relating to his recent fifty-year jubilee, which was saddened by the death, only a week before, of Mrs. Weber.—Professor Hermann Vierordt of Tübingen sends some interesting papers concerning the life and death of his father-in-law, Professor Roth.—Pandit Lāla Chandra Vidyā Bhāskara, of Jodhpur, Marwar, Rajputana, sends a copy* of a Sanskrit poem narrating the life and achievements of the late Professor Whitney, and entitled *Vīṭṭam-Dvāit-Vīṭṭam-vidūṣa jīvana-carita-kāvyaṃ*. It is a beautifully written manuscript of 33 pages in folio. The author says it is a version of the obituary notice of Mr. Whitney which appeared in the *New York Nation* of June 14, 1894. A reprint of this notice had been sent to him.

The Corresponding Secretary reported the names of recently deceased members. The record is as follows :

HONORARY MEMBERS.

Professor Rudolf von Roth, of Tübingen ;
Dr. Reinhold Rost, of London.

CORPORATE MEMBERS.

Rev. Talbot W. Chambers, of New York City ;
Hon. Charles Theodore Russell, of Cambridge, Mass. ;
Dr. Henry Martyn Scudder, formerly of Niigata, Japan.

CORRESPONDING MEMBERS.†

Sir James Redhouse ;
Rev. Dr. William Waterbury Scudder, formerly Missionary at Madanapalli, Madras ;
Rev. Dr. Cornelius V. A. Van Dyck, of Beyrout, Syria.

The Treasurer, Mr. Henry C. Warren, of Cambridge, Mass., presented to the Society, by the hand of Professor Lanman, his accounts and statements for the year ending April, 1896. President Gilman had already appointed, before the meeting, Professors Toy and Lanman as an Auditing Committee to examine the Treasurer's funds and accounts. The Committee reported to the

* He has since then sent a copy for the Society's library and one for Mrs. Whitney.

† The names of the following, several years deceased, had for some reason not been reported to the Society :

Rev. Cephas Bennett, Missionary at Rangoon, Burma, died Nov. 16, 1885 ; Rev. Dr. Nathan Brown, Missionary at Yokohama, Japan, died Jan. 1, 1886 ; Dr. George Rosen, Detmold, Germany, died 1891 ; Rev. Dr. John H. Shedd, Missionary at Oroomiah, Persia.

Society during the meeting that on the 6th of April, 1896, they had examined the accounts and vouchers of the Treasurer and his evidences of actual possession of the Society's property and had found all to be in a satisfactory condition. Their report was duly accepted by the Society. The usual analytical summary of the General Account follows :

RECEIPTS.	
Balance from old account, April 18, 1895.....	\$1,578.39
Assessments (179) for 1895-96.....	\$895.00
Assessments (30) for other years.....	150.00
Sale of publications.....	173.62
Income from funds (other than Bradley Fund).....	138.53
Total income of the year.....	1,857.15
Total receipts for the year.....	\$2,935.54
EXPENDITURES.	
Journal, xvi. 2.....	\$818.64
Job printing.....	80.50
Books for Library.....	29.52
Postage, etc.....	59.73
Total disbursements for the year.....	988.39
Credit balance on Gen'l Account, April 6, 1896..	1,947.15
	\$2,935.54

The Treasurer adds several general statements: The account, so far as receipts are concerned, is an almost precise repetition of the one for 1894-95; and the similarity holds also in respect of the three several principal sources of revenue, to wit, assessments, sale of publications, and interest. As was the case in 1894-95, the Society's outlays for 1895-96 were well within its income.

The state of the funds is as follows :

A. PRINCIPAL OF SPECIAL FUNDS.		
Apr. 18, 1895 :		Apr. 6, 1896 :
\$1482.76	I. Bradley Type Fund (deposited in New Haven Savings Bank).....	\$1542.64
1000.00	II. Cotheal Publication Fund (deposited in the Provident Institution for Savings, Boston).....	1000.00
1000.00	III. Whitney Publication Fund (invested in eight shares of State National Bank stock).....	1000.00
75.00	IV. Life Membership Fund (deposited in the Suffolk Savings Bank, Boston).....	75.00
	B. BALANCES BELONGING TO GENERAL ACCOUNT.	
\$1498.38	I. Cash in Cambridge Savings Bank.....	\$1827.67
71.84	II. Cash in Provident Inst. for Savings, Boston..	109.65
8.17	III. Cash in Suffolk Savings Bank.....	9.83
\$5136.15		\$5564.79

The Librarian, Mr. Addison Van Name, of Yale University, presented his report for 1895-96. It is as follows :

The accessions of the past year have been 67 volumes, 64 parts of volumes, and 136 pamphlets. All received up to the middle of March are included in the list of "Additions" printed in the Society's Journal, vol. xvi., No. 2, just distributed. The most important single contribution is a series of twelve volumes of the publications of the *École des langues orientales vivantes*, Paris, sent in exchange for a set of our Journal. One noteworthy gift, received too late for entry there, deserves special mention—"The Life and Exploits of Alexander the Great," Ethiopic text and English translation, by Dr. E. A. Wallis Budge of the British Museum, London, 1896. These two sumptuous volumes, on large paper, "two hundred and fifty copies only printed for private circulation," are the gift of Lady Meux, of Theobald's Park, Hertfordshire, who bore the expense of publication and to whom the work is dedicated.

The current number of titles in the library is now 4881.

For the Committee of Publication, its Chairman, Professor Lanman, reported as follows: Number 2 of volume xvi. of the Journal had been issued March 31, 1896. It contains Articles V., VI., and VII. of the Journal proper, with the Arabic paging 261-317 ; and as an Appendix, in Roman paging from cxli-cclxxxiii, the Proceedings for Dec. 1894, and for April, 1895, the Additions to the Library, and the List of Members.*—Concerning the size of the last few volumes, the following figures may be of interest :

Vol.	Issued.	Pages of Journal proper.	Pages of Proceedings, etc.	Sum.
xi.	1882-5	396	246	642
xii.	1881	388	---	388
xiii.	1880	376	323	699
xiv.	1890	424	209	633
xv.	1893	283	204	487
xvi.	1896	317	283	600

The sum total for the six volumes is 3444 pages ; and the average is 574 pages per volume. For the fifteen years, the average is about 230 pages per year.

The Directors reported by their Scribe, Professor Lanman, as follows :

They had appointed the next meeting of the Society to be held at Baltimore, Md., Thursday, Friday, and Saturday of Easter Week, April 22d, 23d, and 24th, 1897 : the Corresponding Secre-

* Number 1 of vol. xvi. of the Journal was issued (without Proceedings) in April, 1894. The Proceedings for April, 1893, were issued separately in June, 1893 ; and the Proceedings for March, 1894, were issued separately in September, 1894. Volume xvi. complete consists therefore of No. 1, of these two pamphlets and of No. 2.

tary, *ex officio*, and Professors Bloomfield and Haupt, to serve as a Committee of Arrangements. [Note that in 1898, Easter falls April 10th.]

The Corresponding Secretary, Professor Lanman, had already in his circular letter to the members issued just before the meeting said in his own name as follows :

It is quite true that the By-Laws of this Society do not in any way charge the Corresponding Secretary with the duty of editing its publications. On the other hand, it cannot be said that in recent years the Committee of Publication have charged themselves with that duty. As a matter of fact, since the beginning, the work has been, for the most part, in two or three pairs of hands. Perhaps the function of the Committee has latterly been held to be consultative and appellate; although the acting-editor would certainly not refer a doubtful paper to the Committee in a case where the judgment of an expert more competent on that particular subject chanced to be available outside of the Committee. The Committee has now been increased to six, and is so large that, as a matter of course, there is no sense whatever of individual responsibility among its members.

We may well rejoice in the healthy growth of the Society during the last decade, and in its greatly increased activity and power of achievement. This growth and activity, however, has greatly increased the burdens of the office of Corresponding Secretary. It is manifest that a redistribution of the labor which, whether legally or prescriptively, attaches to that post, has become imperatively and immediately necessary. The most natural division is into the legitimate duties of the office on the one hand and its adscititious editorial functions on the other. I suggest that the Directors appoint one or two persons to edit the Journal, and hold him or them responsible for the proper conduct of that work. Such appointees need not be regarded as officers of the Society, and this change would accordingly involve no alteration of our laws; and the Committee might continue as before.

Even with this change in the incidence of duties, the place of Corresponding Secretary will remain—just as it has been, and like that of the Editors—a laborious one, with much clerical work; and upon the efficient administration of its duties will depend in no small measure the prosperity of the Society. Inasmuch as the transfer of the office with its duties and traditions from one man to another is at best a very wasteful proceeding, it is clear that no one ought to accept the place who is not willing to serve for, say, at least a decade. And finally, since the Society refused to consider this matter last year on the ground of the lack of time, it seems proper to ask now, before the meeting, for any suggestions upon this subject, and for expressions of willingness to undertake this serious responsibility and heavy labor from any member of the Society who will be kind enough to make them.

The Directors reported by their Chairman, President Gilman, as follows :

The Directors recommended that the Society rescind Supplementary By-Law Number II.

Whereupon, a vote being taken, the By-Law was rescinded by the Society.

In the last printed form, that By-Law read as follows: "The Committee of Publication shall consist of five members; they shall be appointed by the Directors, and shall report to the Society at every regular meeting respecting the matters committed to their charge." And it was amended in April, 1895, so as to read as follows: "The Committee of Publication shall consist of six members, of whom the Corresponding Secretary shall be one. The Committee shall be appointed annually by the Board of Directors, and shall report to the Society at every regular meeting concerning the matters committed to its charge. The Corresponding Secretary shall be the Chairman of the Committee."

President Gilman announced that a Committee of the Directors had considered various questions relating to the Society's method of publication, and had made a written report to the Directors; and that, by authority of the Directors, Professor Charles R. Lauman, of Harvard University, and Professor George F. Moore, of Andover Theological Seminary, had been appointed to serve as Responsible Editors of the Journal.

In the manuscript Records of the Directors, vol. i., pages 23 and 24 (compare Journal, vol. i., page xlviii), we read, under date of May 30, 1848, as follows:

"We have been led by some experience to believe that it would be well to distinguish three classes of members, namely, Corporate, Corresponding, and Honorary. The reasons in favor of creating a class of Corresponding Members are, that the Society will often find it for its advantage to seek communication with persons in Europe and in the East, not Americans, by attaching them to itself in this character, without going so far as to name them Honorary Members; and that those Americans resident in the East, who are elected into the Society, sustain to it in fact the important relation of Corresponding Members, and might feel a stronger obligation to act for the Society, if placed formally in that position, while it is quite out of their power either to exercise the rights or to discharge the duties of Corporate Members."

The changes in the times—notably the vastly increased facilities for communication with the Orient through the Universal Postal Union and otherwise, and the presence in the East of many scholars besides those devoted to the work of Christian Missions—have brought it about as an incidental result that the category of Corresponding Members has lapsed into practical desuetude. It is desirable that this fact should be formally recognized by the Society.

It was accordingly recommended by the Directors that Article III. of the Constitution be changed so as to read as follows:

Article III. The members of this Society shall be distinguished as Corporate and Honorary.

Whereupon, a vote being taken, the amendment was adopted by the Society. [Note, however, that the class of Corresponding Members will continue to appear in our printed lists until extinguished by transfers or by deaths.]

By the vote of October, 1857 (Records of the Directors, vol. i., page 51; Journal, vol. vi., p. 579), it was provided

"That the Directors may, at their discretion, and in view of the circumstances of each case, transfer to the list of Corresponding Members persons elected as Corporate Members, but who may have since permanently left this country, and to the list of Corporate Members persons chosen as Corresponding Members, but who may have since transferred their residence to this country."

In view of the above facts and as a corollary to the above changes, it was provided

That members who have, by vote of the Directors, been transferred from the list of Corresponding Members to that of Corporate Members be restored to the list of Corresponding Members, unless they desire to remain Corporate Members, paying the annual assessment.

By-Law Number VII. in its last printed form read as follows:

VII. Corporate members shall be entitled to a copy of all the publications of the Society issued during their membership, and shall also have the privilege of taking a copy of those previously published, so far as the Society can supply them, at half the ordinary selling price. Corresponding and honorary members shall be entitled to the Society's publications only in return for services rendered,—for communications to the Society, or donations to its library or cabinet.

Upon recommendation of the Directors, the Society voted to amend it: first, by adding the words "and Honorary" after the word "Corporate" at the beginning; and, secondly, by striking out the second sentence. [Note that the "membership" of a new member shall be construed to begin with the calendar year in which that new member was elected.]

Upon recommendation of the Directors, it was voted to add the following two paragraphs to By-Law Number III.:

III. b. After December 31, 1896, the fiscal year of the Society shall correspond with the calendar year.

III. c. At each annual business meeting in Easter week, the President shall appoint an auditing committee of two men—preferably men residing in or near the town where the Treasurer lives—to examine the Treasurer's accounts and vouchers, and to inspect the evidences of the

Society's property, and to see that the funds called for by his balances are in his hands. The Committee shall perform this duty as soon as possible after the New Year's day succeeding their appointment, and shall report their findings to the Society at the next annual business meeting thereafter. If these findings are satisfactory, the Treasurer shall receive his acquittance by a certificate to that effect, which shall be recorded in the Treasurer's book, and published in the Proceedings.

The President appointed Professors Toy and Lanman to serve as Auditing Committee for the fiscal year ending Dec. 31, 1896, with Professor Lyon as a substitute in case of the inability of one of the above-named gentlemen so to serve.

Reported—That the Directors had voted that, in case of the adoption of the proposed By-Laws III. *b* and III. *c*, the assessment for the fiscal year extending from April 7, 1896 to December 31, 1896 shall be three dollars.

Next in order of business was the report of the Committee on the Nomination of Officers, consisting of Professors Moore, Haupt, and Gottheil. The Corresponding Secretary, Professor Lanman, after nearly twenty years* of such labor in the service of the American Philological Association and of the American Oriental Society, desired once more to be relieved of his secretarial duties; and accordingly Professor Hopkins, the successor of Professor Whitney at Yale University, was nominated in his stead. No other changes in the administrative offices were proposed. The nominees of the Committee were duly elected by the Society. The names of the Board of Officers for 1896-97 are as follows:

President—President Daniel Coit Gilman, of Baltimore.

Vice-Presidents—Dr. William Hayes Ward, of New York; Prof. C. H. Toy, of Cambridge; Prof. Isaac H. Hall, of New York.

Corresponding Secretary—Prof. Edward W. Hopkins, of New Haven.†

Recording Secretary—Prof. George F. Moore, of Andover.

Treasurer—Mr. Henry C. Warren, of Cambridge.

Librarian—Mr. Addison Van Name, of New Haven.

Directors—The officers above named: and Prof. Lanman, of Cambridge; Professors Gottheil and Jackson, of New York; Prof. Jastrow, of Philadelphia; Professors Bloomfield and Haupt, of Baltimore; Prof. Hyvernat, of Washington.

With a view to avoiding much useless duplication of labor, Professor Lanman had urged the Board of Directors to recommend that the two different offices of Treasurer and of Corresponding Secretary be borne by the same person, as is virtually the case in the American Philological Association‡ and as was the

* More, namely, than the years of incumbency in the offices concerned.

† With Professor Hanns Oertel, of New Haven, to serve as his Deputy during the absence of Professor Hopkins in Europe and India.

‡ See Proceedings of the American Philological Association, p. xliii, in the Transactions for 1884.

case in the Oriental Society in the year 1891-92. It is highly important that both the Corresponding Secretary and the Treasurer should have—so far as is possible—some personal knowledge of the members. This is a difficult matter at best. The results of the inquiries of the one officer have to be communicated, with accurate dates and details, to the other, and *vice versa*. The plan of putting both offices into the hands of one man has resulted in a very clear saving of time and labor both in the case of the Philological Association and in that of the Oriental Society.

It did not appear feasible to carry out the above suggestion at present.

The Directors further reported by their scribe, Professor Lanman, that they had voted to recommend to the Society for election to membership the following persons:

AS CORPORATE MEMBERS:

Edward V. Arnold, Professor of Latin, University College of North Wales, (Bryn Seiriol) Bangor, Great Britain.

George M. Bolling, Instructor in Comparative Philology and Sanskrit, Catholic University of America, Washington, D. C.

Miss Sarah W. Brooks (Graduate of Radcliffe College), 28 Inman st., Cambridgeport, Mass.

Rev. Prof. Joseph Bruneau, S. T. L., St. Mary's Seminary, Baltimore, Md.

Rev. John Campbell, Church of the Incarnation, 4 West 104th street, New York, N. Y.

Miss Elizabeth S. Colton (Student of Semitic languages, and teacher at Miss Porter's School at Farmington), Easthampton, Mass.

Albert J. Edmunds, Historical Society of Pennsylvania, 1300 Locust st., Philadelphia, Pa.

Rev. Adolph Guttmacher, 1833 Linden ave., Baltimore, Md.

Ralph B. C. Hicks (Harvard University), 65 Hammond st., Cambridge, Mass.

Leonard Keene Hirshberg (Johns Hopkins University), 581 Gay st., Baltimore, Md.

Miss Eliza H. Kendrick, Ph.D. (Radcliffe College), Hunnewell ave., Newton, Mass.

Rev. Joseph Lanman, First Presbyterian Church, Princeton, Caldwell Co., Kentucky.

Rev. Clifton Hady Levy, 728 Lennox st., Baltimore, Md.

Henry F. Linscott, Instructor in Sanskrit and Philology, Brown University, Providence, R. I.

Rev. George Palmer Pardington, 194 Park Place, Brooklyn, N. Y.

Hugo Radau, Columbia University, New York, N. Y.

Prof. J. H. Stevenson, Vanderbilt University, Nashville, Tenn.

Dr. Earley Vernon Wilcox, 414 A Washington st., Somerville, Mass.

[Total, 18.]

Whereupon, ballot being had, the above-named ladies and gentlemen were duly elected Corporate Members of the Society.

Professor Gottheil, on behalf of the Committee appointed to make a Catalogue of Oriental Manuscripts existing in American Libraries, reported progress and added that new manuscripts were coming in. The Committee was continued and requested to report at the next meeting.

Professor Morris Jastrow having laid before the Society a scheme for an "Association for the Historical Study of Religions," to be organized, possibly, under the auspices of the American Oriental Society,—President Gilman reported that the Directors recommended the appointment of a Committee to consider what measures may be taken to promote the study of the History of Religions.

The recommendation was adopted; and the Chair appointed as this Committee the following gentlemen: Professor Gottheil, Chairman; and Professors Lanman, Toy, Jastrow, Hyvernat, G. F. Moore, and Jackson; President W. R. Harper; Professor Haupt; Dr. Cyrus Adler; Dr. W. Hayes Ward; and Mr. Talcott Williams.

Incidentally, President Gilman suggested that in the conduct of our future meetings it would be desirable if one of the sessions were reserved for papers of a non-technical character and of general interest, in order that such friends of the Society as are not professional Orientalists may with pleasure and profit take part in its proceedings.

Professors Toy and Haupt were appointed a Committee to present to Professor Green upon his coming anniversary the felicitations of the Society, and therewith the following minute:

The American Oriental Society desires to extend to Professor William Henry Green, the Nestor of teachers of Hebrew in this country, its very hearty congratulations on the celebration of the fiftieth anniversary of his appointment as instructor in Hebrew in Princeton Theological Seminary, and to wish him yet many years of fruitful work.

At the meeting of the Society of Biblical Literature and Exegesis, held in New York City, Dec. 27, 1895, it was "*Voted* to inform the American Oriental Society that we are engaged in the effort to establish at some point in Bible Lands a School of Oriental Study and Research; and to invite the coöperation of the Oriental Society." This vote was duly communicated to the Oriental Society; and Professor Thayer, the President of the Biblical Society, presented the draft of an interesting plan.* Thereupon, on motion of Professor Lyon, the following resolution was adopted:

* This may be found in the *Proceedings* of the Society of Biblical Literature and Exegesis, at the end of volume xv.

The American Oriental Society has received with great pleasure the communication of the Society of Biblical Literature and Exegesis regarding an "effort to establish at some point in Bible Lands a School of Oriental Study and Research."

The Oriental Society cannot express too warmly its approval of this enterprise, believing that the existence of such a School would give a new impulse to Biblical and Oriental scholarship.

With the promise of such coöperation as may become practicable, the Oriental Society wishes the Society of Biblical Literature and Exegesis all possible success in the development of their plan and the establishment of the proposed School.

The business thus dispatched, a brief recess was taken. At 11.30 the reading of papers was resumed at the point where it stopped on Thursday afternoon. The sessions of Friday afternoon and of Saturday morning were devoted almost exclusively to the presentation of papers. The social gatherings of Thursday evening at the houses of Professors Harris and Moore and of Friday evening at the house of Professor Moore were exceedingly pleasant and satisfactory. This was the first meeting of the Society at Andover. The place is in every way so convenient and suitable, and the expressions of pleasure and satisfaction on the part of the visiting members were so cordial, that it is to be hoped that the Society may meet again there at some not distant time.

After the Society had passed a vote of thanks to the Authorities of Andover Theological Seminary for the use of Bartlet Chapel, to Professors Harris and Moore for their kind and most acceptable hospitalities, and to the Committee of Arrangements (Professor Taylor, Chairman) for its efficient services, a final adjournment was had at 11.30 Saturday morning.

The following communications were announced in the Program of the meeting. Number 2, however, was not presented. Numbers 4, 11, 13, 26, 27, and 34 were presented by title. Parts of numbers 9 and 20 were presented informally at the social gathering at Professor Moore's.

1. Professor E. V. Arnold, University College of North Wales, Bangor; Grammatical development in the five epochs of the Rig-Veda and in the Atharva-Veda.

2. Rev. Dr. Blodget, of Peking; Ancestral worship in the Shu King.

3. Professor Bloomfield, Johns Hopkins University; The meaning of the compound *atharvāṅgirasas*, the ancient name of the fourth Veda.

4. Professor Bloomfield, Johns Hopkins University; On the "Frog-hymn," Rig-Veda, vii. 103.

5. Dr. Casanowicz, United States National Museum; Alexander legends in Talmud and Midrash, with reference to Greek and Assyrian parallels.

6. Mr. Edmunds, Historical Society of Pennsylvania; On the compilation of the Pāli Canon.

7. Professor Gottheil, Columbia University; Further references to Zoroaster in Syriac literature.

8. Professor Haupt, Johns Hopkins University; On *ussharnā*, Ezra v. 3, 9.

9. Professor Haupt, Johns Hopkins University; Notes on Genesis ii. 6 and iv. 1.

10. Professor Haupt, Johns Hopkins University; Strack's *Abriss des Biblischen Aramäisch*.

11. Professor Hopkins, Yale University; Prāgāthikāni, I. The vocabulary.

12. Professor Hopkins, Yale University; The root *skar*.

13. Professor Hopkins, Yale University; Conversion-tables for the references to the Calcutta and Bombay editions of the Mahā-Bhārata.

14. Professor Jackson, Columbia University; On Mahā-Bhārata iii. 142. 35-45, or an echo of an old Hindu-Persian legend.

15. Professor Jackson, Columbia University; Some Persian names in the Book of Esther.

16. Professor Jackson, Columbia University; The iterative optative in the Avesta.

17. Dr. Johnston, Johns Hopkins University; Epistolary literature of the Assyro-Babylonians.

18. Professor Lanman, Harvard University; Professor Whitney's translation of the Atharva-Veda.

19. Professor Lanman, Harvard University; Pāli miscellanies.

20. Professor Lanman, Harvard University; Sanskrit epigrams.

21. Professor Lyon, Harvard University; The distinctive feature of Babylonian poetry.

22. Professor Lyon, Harvard University; The argument from silence in discussions of Hebrew poetry and literature.

23. Professor Macdonald, Hartford Theological Seminary; A table exhibiting in a new form the interchange of sibilants and dentals in Semitic.

24. Professor Macdonald, Hartford Theological Seminary; The place of al-Ghazālī in the development of the theology of Islam.

25. Professor G. F. Moore, Andover Theological Seminary; The text and interpretation of Daniel viii. 9-14.

26. Professor Oertel, Yale University; The *Āṭyāyana Brāhmaṇa* and its relation to the *Jāminiya Brāhmaṇa*.

27. Rev. Dr. Peters, St. Michael's Church, N. Y.; The original site of civilization in Babylonia and the date of the same.

28. Dr. Scott, Radnor, Pa.; The Malayan words in English.

29. Dr. Scott, Radnor, Pa.; "Universal" qualities in the Malayan language.

30. Mr. Skinner, Harvard University; The plural termination *ū*, *ūni* in Assyrian verbs.

31. Dr. Torrey, Andover Theological Seminary; Announcement of an edition of Ibn Abd el-Hakam's "Futūḥ Miṣr."

32. Dr. Torrey, Andover Theological Seminary; The meaning of the term "Mpharrshē" as applied to books of the Syriac Bible.

33. Dr. Torrey, Andover Theological Seminary; The origin of the Old Testament Apocryphon called "I. Esdras."

34. Professor Wright, New Church School, Cambridge; Note on a Greek inscription at Kolonieh, Palestine.

1. The Beginning of the Judaic Account of Creation; by Professor Paul Haupt, Johns Hopkins University, Baltimore, Md.

We read at the beginning of the second account of creation in the Book of Genesis (2, 4^b): When JHVH made heaven and earth, and formed man out of the dust of the ground, breathing into his nostrils the breath of life, so that man became a living being—at that time there were yet even no wild plants of the desert, much less plants cultivated for food,* because JHVH had not caused it to rain† upon the earth, and there was no man to cultivate the ground, but אֵל used to go up from the earth, watering the whole surface of the ground.

The Hebrew word אֵל, which I have here left untranslated, is rendered by most scholars, *mist*, *vapor*.‡ We find the translation, "a mist

* Cf. Hupfeld, *Die Quellen der Genesis* (Berlin, 1853), p. 116. See also Cheyne's note on Isaiah 4, 2, in the *Sacred Books of the Old Testament* (English translation).

† This would have produced at least the wild plants.

‡ Cf. Vogel in his edition (Halae, 1775) of Hugonis Grotii *Annotationes in V. T.* (אֵל *vapores* significat, qui de terra adscenderunt); Böhlen (1835); Böhmer (1862); Schrader (1863); Tuch (1871); Keil (1878); Delitzsch (1887); Frapp (1892); Ad-dis (1892); Dillmann (1892); Spurrell (1896). If אֵל meant *mist* or *vapor*, it would be better to take עֲלָה as Hif'il as in Jer. 10, 13 (=51, 16; quoted in

used to go up,"* without a query,† even in the new German Version, edited by Professor Kautzsch, of Halle. In the second edition of Kautzsch and Socin's critical translation of the Book of Genesis, however, which appeared one year after the publication of the Book of Genesis in Kautzsch's AT, the word אֲרָ is left untranslated, and in a footnote the editors state that the traditional rendering *mist* or *vapor* is very doubtful. They call attention to Friedrich Delitzsch's remarks in his great *Assyr. Wörterbuch* (Leipzig, 1886), p. 125, where אֲרָ in our passage, as well as in Job 36, 27, is combined with the Assyrian *edû* "flood."‡ The reference to the Assyrian *edû* is also given in the last edition of Dillmann's Commentary on Genesis, p. 52, and in Gesenius-Buhl's Hebrew Dictionary.§ The notes on אֲרָ in Friedrich Delitzsch's Hebrew Dictionary (*Assyr. Wörterb.*, p. 126) are, unfortunately, still in store for us.

The rendering *flood* was suggested a hundred years ago by the Scottish Roman Catholic Biblical critic Dr. Alexander Geddes,|| who published a new version of the Bible "faithfully translated from Corrected Texts of the Originals, with Various Readings, Explanatory Notes, and Critical Remarks." The work appeared in 1792, and was followed in 1800 by "Critical Remarks on the Hebrew Scriptures." Geddes says, like Friedrich Delitzsch, that אֲרָ means *flood*, and that even in Job 36, 27 it does not mean *mist* or *cloud*; perhaps we should read in the passage of Job, with Houbigant, נֶאֱדָרִי. His remarks are also given, in German, in J. S. Vater's *Commentar zum Pentateuch*, vol. i, p. 18 (Halle, 1802).

ψ 35, 7) וַיַּעֲלֶה נְשִׁימִים מִקֶּצֶה הָאָרֶץ = *He causes the vapors to ascend from the ends of the earth, i. e. probably from the universal sea encircling the disc of the earth.* Cf. Am. Or. Soc. Proc., March, 1894, p. civ.

* This is the translation given by Rabbi Saadya (892-942) in his Arabic Version of the Pentateuch. But Saadya inserts the negative: **وَلَا بَخَارَ كَانَ** **يَصْعَدُ مِنْهَا فَيَسْقِي جَمِيعَ جَهَّهَا**. Cf. Lagarde, *Materialien zum Pentateuch*, i, p. 3 (Leipzig, 1867). Grotius (who, however, translates *spring*) thinks that Saadya read the negative in the Hebrew MS. he used. But Houbigant (1777) is no doubt right in remarking that the negative was merely supplied by Saadya *suo Marte*. After all, the insertion of the negative is more sensible than the traditional rendering.

† Wellhausen has queried the rendering *Nebel* in all his editions of his *Prolegomena*; cf. fourth edition, p. 304; first edition (1878), p. 342.

‡ Delitzsch's father, in his commentary on Job (1876), compared אֲרָ with the Assyrian *edû* "asphalt," which in the *Assyr. Wörterbuch* is derived from the same stem as *edû*.

§ See also Gunkel, *Schöpfung und Chaos* (Göttingen, 1895), p. 15.

|| Geddes was the priest of a Roman Catholic congregation near Aberdeen, and he received the honorary LL. D. degree from Aberdeen. He is said to have resembled Herder. Cf. Cheyne, *Founders of Old Test. Criticism* (London, 1893), pp. 4-12; Holzinger, *Einleitung in den Hexateuch* (Freiburg, 1893), p. 43.

If we adopt Geddes' suggestion, the translation of v. 6 would be: a flood used to come up from the earth, watering the whole surface of the ground. Kautzsch and Socin refer to Gen. 7, 11 in the priestly account of the Deluge, where we read that in the 600th year of Noah's life all the fountains of the great deep were broken up, and the windows of heaven opened. Assy. *edā*, however, is never used of underground water. In all the passages I know of, it refers to the water of seas and rivers. I believe that we should read **וַאֲדָר יַעֲלֶה עַל-הָאָרֶץ** instead of **וַאֲדָר יַעֲלֶה מִן-הָאָרֶץ**. This would mean: The water used to come over the land, and flood the ground.

We must remember in this connection that the Biblical accounts of Creation, both the priestly and the prophetic,* go back to Babylonia,† just as the story of Paradise points to Babylonia.‡ Babylonia is not like Palestine, as we read in Deut. 11, 11, a land of hills and valleys that drinks water from§ the rain of heaven, a land which **יְהוָה** cares for, whereon His eyes are from the beginning of the year to the end of the year; Babylonia was, like Egypt, a land where it was necessary to water the seed that was sown, with the foot|| like a garden of vegetables. Without artificial irrigation Babylonia is a desert¶; the higher regions dry up, and the lower districts become swamps.¶ Many a part of Babylonia that was a land of gardens a thousand years ago, during the reign of the Abbasside Caliphs, is now covered with water. The overflowing of the Euphrates and Tigris is not, like the annual inundation of the Nile, a blessing, but it inflicts incalculable damage. In Babylonia not only the fertility of the soil, but the soil itself is, just as in Holland, the product of human labor.¶ Without drainage and irrigation, cultivation of the ground is impossible. The Babylonians forced the Tigris to flow along the eastern boundary of the alluvial plain, and the Euphrates was made to take its course to the sea through Lake Nájaf, instead of losing itself in the swamps of Southern Babylonia.¶

From this point of view, the words, *And man was not there to cultivate the ground, but the water of the sea and the rivers used to come over the*

* For the past fourteen years I have always stated in my classes that the Judaic accounts of Creation, the Deluge, etc., were of course pre-exilic, but that they had afterwards been retouched in some passages.

† Cf. Gunkel, *Schöpfung und Chaos*, p. 169.

‡ See my paper in *Ueber Land und Meer*, vol. 73, no. 15, p. 349.

§ Literally according to.

|| I. e. either by water-wheels turned by men pressing upon them with the foot in the same way that water is still often drawn from wells in Palestine; or "the reference may be to the mode of distributing water from the canals over a field, by making or breaking down with the foot the small ridges which regulate its flow, or by using the foot for the purpose of opening and closing sluices." Cf. Driver's Commentary on Deuteronomy, p. 129 (Edinburgh, 1895).

¶ See Sprenger, *Babylonten* (Heidelberg, 1886), pp. 19, 27, 22, 23, 73.

land flooding the whole surface of the ground, appear in a new light. The Biblical idea of Chaos, the whole earth submerged, with no separation between land and water,* is specifically Babylonian. Wellhausen supplies at the beginning of the second account of creation: *Es war alles trockene Wüste*, it was all an arid waste. He should have substituted *Wasserwüste*, a watery waste.†

The reading ואר יעלה מן הארץ instead of ואר יעלה על הארץ is found in a manuscript of the Targum on the Pentateuch (Cod. Mus. Brit. Or. 2328) of which Merx has published some extracts in his *Chrestomathia Targumica* (Berlin, 1889), p. 61: ועננא הוה סליק על ארעא ומשקי (אשקי) ית כל אפי אדמתא. Most editions of the Targum have מן, including the Editio Ulyssiponensis, quoted by Merx in the footnotes, i. e. the Lisbon edition of 1491.‡ The Samaritan Targum also read: יענן יסק מן ארעה וישקי ית כל אפי אדמתא (Heidenheim, *Der samar. Pentateuch*, Leipzig, 1884).

The substitution of מן for על was, of course, necessary if אר was interpreted to mean mist or spring. The meaning of the word must have been lost at a very early period. The Ancient Versions vary very much. The LXX, Aquila, and the Vulgate, as well as the Peshita, translate spring (πηγή, κρηνη, fons, مخرج).§ The Targum, on the other hand, renders cloud, עננא, both the Targum Onkelos and the Targum Jerushalmi. In the same way the LXX translates אר in Job 36, 27 νεφέλη. The rendering νεφέλη is also found in the translation of our passage, Gen. 2, 6, in the Græcus Venetus: νεφέλη δ' ἀναβαίνοις πρὸς τῆς γῆς καὶ ἄρδοι ξύμπαν τὸ πρόσωπον τῆς γῆς. And J. D. Michaelis, 1775, translated: *Es stiegen aber Wolken von der Erde auf und tränkten die ganze Oberfläche des Landes*.

אֵר is not found in any other passage of the O. T. except in Job 36, 27, at the beginning of the second half of the last discourse of Elihu:

* L. 6 of the first fragment of the cuneiform Creation Tablets reads: *gipara la gippura, gisá lá kē'a* "no ground had yet been diked (i. e. surrounded and protected with dikes or embankments to prevent inundations), no fields were to be seen." Cf. Delitzsch, *Das babyl. Weltschöpfungsepos* (Leipzig, 1896), p. 120. *Giparu* is a synonym of *áru* in l. 135 of the Deluge Tablet: *kima ári mizxurat usálu*, "fen land had become like the diked field," i. e. everything was covered with water.

† Cf. Berossus' *ἀκρότος καὶ ὕδαρ* (Gunkel, *op. cit.*, p. 17). Several Jewish scholars propose to read in the first verse of the Bible: In the beginning God created the water and the earth, מים instead of שמים (Grätz, *Emendationes*, ad loc.).

‡ Cf. Merx, *Bemerkungen über die Vocalisation der Targume* in the Transactions of the Berlin Congress of Orientalists, vol. ii, p. 143 (Berlin, 1882).

§ Diestel conjectured עין. Cf. Lagarde, *Mater. z. Pent.*, p. 24, وكان يرتفع عين ماء وتسقى جميع وجه الأرض.

יִגְרַע נִטְפֵי-מַיִם
 יִזְקוּ מִטָּר לְאָדָם
 אֲשֶׁר-יִלְלוּ שְׂחָקִים
 יִרְעֲפוּ עָלָי אָדָם רַב :

The Authorized Version renders :

He maketh small the drops of water ;
 They pour down rain according to the vapor thereof,
 Which the clouds do drop,
 And distil upon man abundantly.

The rendering *abundantly* would require the emendation רַב = לָרַב adopted by Siegfried in his edition of the Hebrew text. Delitzsch translates : *sie sickern als Regen bei seinem Nebeldunst* (they ooze as rain at His misty vapor); Hitzig : *sie seihen zu Regen seinen Dunst* (they filter His vapor into rain); Siegfried-Stade : *lösen den Regen in Nebel auf* (they dissolve the rain into vapor); Hoffmann : *er zieht Wassertropfen heran, die von seinem Nebel zu Regen geseiht werden, welche der Wolkenhimmel herabrinnen lässt, sodass sie auf viele Menschen triefen* (He attracts drops of water which are filtered into rain by His mist, which the welkin causes to flow down, so that they drip on many men). According to Hoffmann the mist or vapor is the strainer through which the drops of water are filtered, and become rain. He reads יִזְקוּ instead of יִזְקוּ. Dillmann translates : *in consequence of His mist (auf seinen Nebel hin, in Folge desselben).*

The suffix occasions some difficulty. I am inclined to think, with Geddes and Friedrich Delitzsch, that אָדָם in the line of Job means *flooding, watering, irrigation*, just as in our passage of Genesis, but the final ך is probably not the suffix, but a trace of the old vocalic case-ending, as we have it in the Assyrian *edû* and in Hebrew forms like חֵיתוֹ מַיִם, חֵיתוֹ אֶרֶץ ψ 114, 8 (König, *Lehrgebäude*, ii, 1, p. 432, β).*

The combination of Hebrew אָדָם with Assyrian *edû* is all the more probable as the ideogram of *edû* shows that it means *water of irrigation*, the ideogram for *edû* is explained in the vocabulary ii R. 30, 15 by *šaḡû ša eqli* (حقل) "irrigation of the field," and *edû* is also used in connection with the Shaf'el *šusqû*, the Assyrian equivalent of השקה, in the Cylinder Inscription of Sargon II, commented on by

* The final *ô* in the Babylonian loanword *bîlû*, "tribute" (Assyrian *bîlat* = Ethiopian *bênât*; cf. Proc. Am. Or. Soc., Oct. 1887, p. coliv, below), in the Book of Ezra, seems to be different.

Professor Lyon, l. 37: *ki gibiš edī me nuṣṣi* ṣuṣqī* (cf. Lyon's *Sargon*, p. 67; Schrader's KB. ii. 45, 37) "to irrigate the land with abundant water like the flood of the sea." The word נִיץ† calamity may be a differentiation of נָח flood. Flood or high water is a common metaphor in Hebrew for affliction, calamity, distress.‡ In Assyrian we have for נִיץ distress the Pael form *uddā*, plur. *uddāti*.§ The comparison of נִיץ calamity with Arabic *آد يهود* to bend, to trouble, is just as doubtful as the combination of נָח mist (?) with Arabic *إياد*.

2. The seat of the earliest civilization in Babylonia, and the date of its beginnings; by Dr. John P. Peters, New York, N. Y.

One of the conspicuous and unpleasant features of travel in Babylonia are the mortuary caravans which one meets conveying the dead from Persia to the sacred city of Nejed. All travelers in this region refer to their experience in encountering these caravans, and especially to the unpleasantness of spending the night at the khan with one of them. The Persians believe that the man who is buried in the sacred soil of Nejed will find a quick and more certain entrance into paradise. Not unfrequently, persons approaching death, if they are able, come down to Nejed to die. I recall an instance of my own experience. I was awakened very early in the morning in the khan at Nejed by the request that I would get up, as my next-door neighbor had died during the night and they wished to carry out the corpse. He had come down for the purpose of dying there. In other cases, a man having died at home, his pious friends bring the body to Nejed to be buried; a journey, it may be, of a month or more. When one considers the way in which the coffins are made and the heat of the climate, it may be imagined that it is exceedingly unpleasant to spend a night in a khan close to a family bent on such a pious errand. Families coming down to Nejed for such a purpose frequently bring with them handsome rugs, one of which will be used as a pall for the dead at the funeral, while afterwards all will be sold to pay the expenses of the journey. I have one such rug—and I prize it highly—which served, before I bought it, as a pall at the funeral of a man in Nejed. It is a dated Persian rug, about eighty-five years old.

Ordinarily several families bent upon such an errand unite together to form a caravan. One of the common routes of travel is through Baghdad, across Kerbela, which is itself a sacred burial city, although of

* For *nuṣṣi*, see my remark in *Die akkadische Sprache* (Berlin, 1883), p. xlii.

† Cf. e. g. Prov. i, 27: אֵתָהּ כְּסוּפָה יָבֹא *your calamity comes like a whirlwind*.

‡ Is. 8, 7, 8; ψψ 18, 17; 124, 4, 5, etc.; cf. Dr. Stevens' Commentary on the Songs of Degrees (Johns Hopkins thesis) in *Hebræica*, xi, 77.

§ See Delitzsch's *Handwörterbuch*, p. 22*.

a sanctity in that regard much inferior to Nejef, and so down to Nejef. Another route is from the south. I do not know at what point pilgrims by this route enter Babylonia. I have met them first on the Ateshan canal above Samawa. They ascend this canal, cross a portion of the Bahr-i-Nejef, and go up the continuation of the Hindieh Canal above the sea to a point opposite Nejef, called Seheir, about three hours by donkey caravan from Nejef. Pilgrims carrying their dead to Nejef frequently place a coin in the mouth of the deceased for payment of expenses. Robbers infest the road and plunder smaller caravans, even stealing the coin from the mouth of the corpse. Between Samawa and Nejef some of these robbers fell upon us, as we were making the journey after dark, mistaking us for pious pilgrims carrying their dead to the sacred city. We were better armed than the brigands, and the consequence of their attempt to plunder us was that we captured them.

But not only do relatives bring the bodies of their dead to be buried in holy ground; there are also contractors who make it their business to go about from place to place and collect bodies of persons whose relatives wish to have them interred in Nejef but are unable or unwilling to incur the expense of the journey to that city. Bodies are dug out of the ground and consigned to the care of these contractors, who engage to transport them to Nejef and secure them proper burial there. The coffins used for this purpose at the present time are ordinary plain boxes of rough board. The Arabs of Babylonia use, instead of coffins made of boards, reeds, in which they encase the body, binding the two ends of the roll together with palm cords. Formerly it was the practice to bury the dead in the city of Nejef itself; and travelers tell us that caravans camped outside of the walls of the city, haggling with the Imāms of Ali's shrine with regard to the price, while the air was polluted by the terrible stench arising from the decomposing bodies. Under Turkish rule a stop has finally been put to this practice, and interments within the walls of Nejef are now either no longer made, or only made on special occasions by the payment of a great price. The whole plain about the city is, however, one vast cemetery.

The reason why Shiite Moslems have chosen Nejef as a place of interment is because it is the burial place of their prophet, Ali. But Nejef and Kerbela are not the only sacred burial sites. Half way between Diwanieh and Hillah, on the west shore of the Euphrates, lies a little *weli*, known as Imām Jasim, surrounded by a few miserable mud hovels. The neighborhood of this *weli* is reputed sacred, and many acres of ground are covered with the graves of the Shiites. There are also other similar burial places in lower Babylonia. The interesting fact to notice is, that while the particular locality in which interments take place may be new, the general practice of burial in this region is of the greatest antiquity. From time immemorial it has been the custom to bring the dead from great distances to be buried in the sacred soil of Babylonia. Such is the practice to-day; and excavations in the burial fields of Erech, Zerghul, and other places, have shown that the same practice was in existence in the Persian period, in the Parthian

period, and in the Babylonian period. Age after age, the dead have been brought from distant countries to be buried here.

It is evident, when we compare the modern use with the ancient and observe the persistence of the custom, that for some reason, at a very early period, the soil of a certain part of Babylonia came to be regarded as sacred for purposes of interment. With the change of races and the change of religions in Babylonia, the original causes which led to the interment of the dead in that country passed away; nevertheless the custom still continued, being inherited as a fact by each new religion and each new race, and incorporated in its practice in precisely the same way in which old sacred sites and ceremonies are taken over from their predecessors by new nations and new religions, even where from the point of view of logical consistency such adoption would seem to be utterly out of the question. In the matter of sacred sites and ceremonies, every one who has read history is familiar with the phenomenon. The sacred sites of Aphrodite have been inherited by the Virgin Mary; and the liquefaction of blood, practiced as a heathen miracle in the time of Horace, is continued under the Christian religion with a different name. So also the custom of burying the dead in Babylonia, having been once established, was continued from age to age and from religion to religion under substantially the same forms. The question is, How did the practice of bringing the dead from distant countries to bury them in certain parts of Babylonia originate?

I do not think that we shall have to search long for the answer to this question. Everyone familiar with the records of the Hebrew religion will remember the indications of a similar practice among the Hebrews, in connection, primarily, with the cave of Machpelah at Hebron. We are told in the twenty-third chapter of Genesis that Abraham bought "the field of Ephron which was in Machpelah, which was before Mamre," and that he buried there Sarah his wife. Afterwards Isaac and Rebecca his wife were buried there. There Jacob buried Leah. Later Jacob himself died during the sojourn of the Israelites in Egypt; and it was considered necessary to bring his body back to his own land, and bury it with his ancestors in Machpelah. Not only that; we are told also that, although Joseph died in Egypt, it was considered necessary, when the Israelites came up to Canaan, to carry his body with them and bury it there. Now, while this may not represent history in a literal sense, certainly it is history in a broader sense. It gives us a picture of the Hebrews carrying their dead from distant places to be buried in the sacred soil of Canaan, and tells us that they did so because that was their ancestral home. Hebron became a burial place to them, not because it was originally sacred in itself, but because their forefathers had lived and were buried there. We have enough similar examples among uncivilized and half-civilized peoples to establish the general principle that there is a tendency to carry the dead for burial to the ancestral home.

Inversely, we may argue, where we find people carrying their dead a long distance for interment, that they do so because they count as

their ancestral home that place to which they are now carrying back their dead. Of course, the custom once established, a religious sanction of a new description may be given to it, so that the place becomes holy in and for itself, and peoples who have no ancestral connection with the place may ultimately come to bring their dead to be buried there by the side of the people to whose ancestors it belonged. In the custom existing at the present day of bringing bodies from distant parts of Babylonia, from Persia, and even from India to be buried in Nejeef or some other similar sacred site in Babylonia, we have this secondary development, in which the practice of interment, having been once established, has received a religious sanction, and the place itself has come to be regarded as holy. The same was true, presumably, with reference to the practice of burial in Babylonia by the Persians and the Parthians; but there must have been behind all these a period when people brought their dead to be buried in Lower Babylonia because that was the place from which their ancestors had gone forth; and the origin of the practice of burying in Babylonia persons who have died in distant lands is to be sought in the fact that the region in which those burials have always taken place was the ancestral home of some people who originated that custom by bringing back their dead to Babylonia from the new homes to which they had migrated.

To just what portion of Babylonia do we find this practice of burial attaching itself? One of the most famous and largest of the necropoleis of Babylonia is that at Erech, which was partially explored by Loftus and is described by him in his "*Chaldæa and Susiana*." The heading of the eighteenth chapter in that volume is in itself suggestive; "The absence of Tombs in the Mounds of Assyria.—Their abundance in Chaldæa.—Warka a vast Cemetery," etc. The opening part of the chapter is worth quoting in this connection: "It is a remarkable fact that, in spite of the long succession of years during which excavations have been carried on by the English and French governments in the mounds of Assyria, not a single instance has been recorded of undoubted Assyrian sepulture. . . . The natural inference therefore is, that the Assyrians either made away with their dead by some other method than by burial, or else that they conveyed them to some distant locality. If, however, Assyria be without its cemeteries, Chaldæa is full of them; every mound is an ancient burial-place between Niffar and Mugeyer! It would be too much, with our present knowledge, to say positively that Chaldæa was the necropolis of Assyria, but it is by no means improbable that such was the case. Arrian, the Greek historian, in describing Alexander's sail into the marshes south of Babylon, distinctly states that most of the sepulchres of the Assyrian kings were there constructed, and the same position is assigned them in the Peutingerian tables. The term Assyria, however, in the old geographers, is frequently applied to Babylonia, and the tombs alluded to may therefore be those only of the ancient kings of Babylonia. Still, it is likely that the Assyrians regarded with peculiar reverence that land out of which Asshur went forth and builded Nineveh, and that they interred their dead around the original seats of their forefathers.

Whether this were so or not, the whole region of Lower Chaldaea abounds in sepulchral cities of immense extent. By far the most important of these is Warka, where the enormous accumulation of human remains proves that it was a peculiarly sacred spot, and that it was so esteemed for many centuries. It is difficult to convey anything like a correct notion of the piles upon piles of human relics which there utterly astound the beholder. Excepting only the triangular space between the three principal ruins, the whole remainder of the platform, the whole space between the walls, and an unknown extent of desert beyond them, are everywhere filled with the bones and sepulchres of the dead. There is probably no other site in the world which can compare with Warka in this respect; even the tombs of ancient Thebes do not contain such an aggregate amount of mortality. From its foundation by Urukht until finally abandoned by the Parthians—a period of probably 2500 years—Warka appears to have been a sacred burial-place. In the same manner as the Persians at the present day convey their dead from the most remote corners of the Shah's dominions, and even from India itself, to the holy shrines of Kerbella and Meshed Ali, so, doubtless, it was the custom of the ancient people of Babylonia to transport the bones of their deceased relatives and friends to the necropolis of Warka and other sites in the dread solitude of the Chaldaean marshes. The two great rivers, the Tigris and Euphrates, would, like the Nile in Egypt, afford an admirable means of conveying them from a distance, even from the upper plains of Assyria.

I was nowhere enabled to ascertain how deep in the mounds the funereal remains extend, although in several instances trenches were driven to the depth of thirty feet, beyond which the extreme looseness of the soil prevented my continuing the excavations with safety to the workmen; but I have every reason to believe that the same continuous mass of dead reaches to the very base of the highest portion of the platform—a depth of sixty feet. On this account there is considerable difficulty in obtaining information concerning the most ancient mode of disposing of the dead at Warka. It is only at the edges of the mounds where least built upon that the undoubted primitive tombs and their accompaniments occur."

Not far from Erech or Warka, perhaps a day's journey away, lies the mound of Umm-el-Aqarib. This was visited by de Sarzec, who found there one of the heads of statues now in the Louvre. He does not seem to have recognized the character of the place, which he calls by the name of Moulagareb. It was visited by Dr. Ward on the Wolfe expedition, and recognized by him as a necropolis. At the time of my visit, in 1890, I had the advantage of the report of the Germans of the work of their expedition at Zerghul and Hibba. I found at Umm-el-Aqarib a cemetery regularly laid out. There were recognizable streets, on which abutted the places of burial proper. I dug out some of these sufficiently to ascertain their general character as tombs, and also that one tier was built upon another, so that presumably the whole mound is one vast

accumulation of burials. In those portions of the mound which I excavated there were no burials of the later period, as at Erech, but every thing belonged to the old Babylonian period, presumably 2000 B. C. and earlier. There was one structure of considerable size, which may have been a temple, but I found no evidence of the existence of a city of the living in connection with this necropolis, although there was, a few miles away, a very large and important group of cities, represented by the ruin-mounds of Yokha, Ferwa, and Abu-Adham. It will be seen that this necropolis is in many respects similar to the one which the Germans excavated at Zerghul south of the Shatt-el-Haf.

Not far from Nippur, about a dozen miles south-south-east, lies the ruin-mound of Delehem. I was unable to conduct excavations at this point, but from my experience I think I may safely say, after an examination without excavation, that Delehem is a necropolis of a similar character, although smaller than Umm-el-Aqarib. In the immediate neighborhood of Nippur there are, further, a considerable number of small mounds, such as Derehem, about four or five miles away to the south-east, and Abu-Jowan, about the same distance to the north-east, as well as some still smaller unnamed mounds closer to the actual ruins of Nippur, which appear to have been burial mounds. I was able to examine these only slightly, but such examination as I made revealed nothing but graves; so that I concluded that in all probability these mounds represented places of burial at the time of the prosperity of Nippur. Delehem is too far from Nippur to have been the necropolis for that city only, and it is equally remote from the large ruins of Bismya. I have assumed that it was an independent necropolis like Zerghul and Umm-el-Aqarib. Taylor, in excavating at Mughair and Abu-Shahreïn (which, by the way, is no longer known, as far as I can ascertain, by that name, but is now called Nowawis), found frequent interments, although he seems to have found no separate necropolis.

Similarly, I found at Nippur interments in all parts of the ruins, among the houses and temples or under them, just as we find at the present day in some of the more remote Turkish and Arab towns. As Loftus has pointed out in the passage quoted above, these are the conditions prevailing everywhere, from Nippur southward, where excavations have been conducted. On the other hand, north of Nippur, in Babylonia as in Assyria, we find no necropoleis, and comparatively few interments in or about the cities and ruins which have been explored. In exploring Babylonia from Nippur southward the question which arises is, Whence have we so many burials? Whereas from Nippur northward the question which arises is, What did they do with their dead? From our present knowledge it would seem that it was the practice to bring the dead out of both northern Babylonia and Assyria, to be interred in the region of Lower Babylonia, from Nippur southward. The suggestion to be derived from this fact, if it be a fact, and I am inclined to think that it is, is that the region mentioned above was the original home of the ancestors of both the people of northern Babylonia and of Assyria, to which the inhabitants of those

countries looked back as a sacred spot because their ancestors had come from there. This view is further supported by the fact that there existed at the northern limit of that region, at Nippur, a temple looked upon as the most ancient and sacred in the Babylonian world, namely, E-Kur, the temple of En-Lil, or the great Bel. At a later date the land of burials was extended a little to the northward.

And now, assuming this original land of burials to be the home of Babylonian civilization, what was the date of the origin of that civilization? The southern limits of the region above mentioned differ greatly according to the date at which you consider it. The natural boundary on the south is the Persian Gulf. At the present time that is some 230 miles south-east of Nippur, in a direct line, and about 100 miles below Mughair, the ancient Ur. According to the calculations of Ainsworth (see Ainsworth's "Researches in Assyria, Babylonia and Chaldea," London, 1838, pp. 181 ff.), there is added each year at the mouth of the Shatt-el-Arab ninety feet of land. That is, the land encroaches upon the sea that much each year. Using Arrian's narrative of the voyage of Nearchus, and Pliny's account of the country at the head of the Persian gulf, largely derived therefrom, Ainsworth endeavors to determine the position of the head of that gulf in the time of Alexander the Great. He observes that "Alexander called by his name the Arabian colony of Tospasius, Spasius Charax, or Charax, and that this was situated a little less than one mile from the sea." Pliny, *N. H.* vi. c. 27, describes the situation of Charax: "Charax habitatur in colle manu facto inter confluentes, dextra Tigrim, læva Eulæum." From the fact that it was at the confluence of the two rivers, this site can be readily determined. It is occupied by the modern town Mo'ammerah, which is situated at the junction of the Shatt-el-Arab and the Karoun. But Mo'ammerah was forty-seven miles away from the Persian gulf at the time of Ainsworth's measurements. Between the time of Nearchus, 325 B. C., and the time of Ainsworth, 1835 A. D., a period of 2160 years, forty-six miles of new land had therefore been formed at the head of the Persian gulf. According to my calculations this would make the average deposit from Alexander's time to our own about 114½ feet a year, but Ainsworth makes it 90.

Ainsworth further attempts to locate the Terephon or Tiridotos, said to have been founded by Nebuchadrezzar at the mouth of the Euphrates. For the location of this place, however, we have not the same data: and Ainsworth's location of it at Jebel Sinam, some ten miles below Zobeir, and therefore about that distance below the modern Bassorah, must be accepted with caution. If it were situated at the place named, it must have been about nine miles from the sea in Nebuchadrezzar's time, and not upon the sea, as Ainsworth seems to suppose; unless Ainsworth's calculations are quite untrustworthy and the rate of deposit between Mo'ammerah and Bassorah was more than twice as rapid as between Mo'ammerah and the sea. I fancy, however, that a site for Terephon even as far as nine miles from the coast in Nebuchadrezzar's time would in reality quite suit the requirements of the situation as actually described.

But this is a side question. The fact of a large alluvial deposit, measurable at least by average over a long period of years, at the head of the Persian gulf is obtained by the determination of the fact that the site of the modern Mo'ammerah was one mile from the sea in 325 B. C. Now from the gulf up to about the parallel of Baghdad the entire Babylonian plain is an alluvial deposit, mainly from the rivers Tigris and Euphrates; and from the general configuration of the region we may, I think, fairly argue that the rate of deposit is likely to have been always approximately the same. Having thus fixed the rate of deposit for the section from Mo'ammerah to the gulf, we may reckon back from this to obtain the date of formation of any given part of Babylonia. On the basis of Ainsworth's figure of 90 feet a year, we find that the sea would have reached up to the site of Ur about 7550 B. C. Taking my figures derived from Ainsworth's measurements, 114½ feet a year, we find that the seacoast would have been at that point about 5500 B. C. I believe that Ainsworth's figure is based not entirely upon calculation from the site of Mo'ammerah, but partly at least upon measurements of the present rate of increase. Possibly a middle rate would more nearly represent the actual average, giving us, say 6600 B. C. as the date required. I have no way of determining this matter, however; and while I believe that we can place reliance for the determination of the earliest possible date of Ur upon the measurement of the rate of alluvial deposit, I fancy that we must regard the date obtained by such measurements as only approximate and liable to vary a few hundred years from exactitude.

In old Babylonian tradition there is but one city further south than Ur and Eridu (Eridu stood on the solid plateau of the Arabian desert on the edge of the alluvial deposit, just within sight of Ur), and that is Surippak, the city of the ark. Whether this was a mythical place or not I do not know, but at least the site of Surippak has not yet been identified. Assyriologists regard Ur as having been originally a coast-city from the references in the inscriptions. This condition might, however, be fulfilled by a location a dozen miles or so from the actual coast on a navigable river or canal; but at least, if not on the sea, a city to be regarded as a coast-city must have been within a very few miles of the coast. As situated, not in the middle of the alluvial tract, but close to the western edge of the same, it is possible, and I suppose probable, that the land on which Ur stood was formed before that in the middle of the plain. The gulf might have extended further northward for some time after this strip of land along the shore had already become habitable.

Judging from the references in ancient Babylonian inscriptions, Ur must have been, as already stated, about the most southerly city of Babylonia in the earliest period. It was also at the southern limit of the burial-region, so far as we know. At the northern limit of that region apparently lies Nippur. Now, in the inscriptions, Sin of Ur is mentioned as the son of En-Lil or Bel of Nippur. This suggests an earlier date for Nippur, or at least for its temple and worship, than for Ur or its temple and worship, but establishes a close relationship

between the two. Our excavations at Nippur, if we accept the date of Sargon of Agane as fixed, as all Assyriologists assume that it is, at 3800 B. C., compel us to relegate the founding of that city to a period considerably antedating 6000 B. C., and perhaps antedating 7000 B. C.

My suggestion, from the various facts here marshalled, would be that the original home of civilization in Babylonia was the strip of land from Nippur southward to the neighborhood of Ur, and not, as has sometimes been argued, the region about Babylon and northward to Sippara. While the latter region is in itself older, it does not seem to have been older as the home of civilized man. The ancestors of the civilization of Babylonia seem to have come from the region between Nippur and what was then the coast of the Persian gulf. This would accord also with the tradition preserved to us in later sources that civilization came to Babylonia out of the Persian gulf. Possibly Eridu, on the Arabian plateau near the western shore and not far from the head of what was then the Persian gulf, may represent the oldest seat of that civilization. However that may be, at a very early period Nippur became the center of civilization and religion, being founded at a time when everything below Ur probably, and possibly some part of the region to the north of it, was still under water. As early as the close, if not the beginning, of the seventh millenium B. C., this strip of land at the head of the then Persian gulf seems to have been the home of civilized men, and from here civilization spread northward.

3. The termination *û*, *ûni* in Assyrian verbs; by Macy M. Skinner, Assistant in Semitic Languages in Harvard University, Cambridge, Mass.

The third masculine plural of the present, preterite, and permansive of Assyrian verbs, which usually ends in *û*, is frequently found with the longer form in *ûni*.* An examination of prose texts extending over a period from Hammurabi to Cyrus, as well as of some poetic material, has yielded the following results.†

* The feminine in *ûni* is of very rare occurrence and we shall accordingly confine ourselves to the masculine.

† The texts consulted were: for Hammurabi, the Louvre inscript, in Ménant's *Inscript. de Hammourabi*, pp. 13-20; for Agu-kakrimi, VR33; for Ramman-nirari I., Harvard Semitic Museum tablet; for Nebuchadrezzar I., VR55-57; for Tiglath-pileser I., Prism inscript, IR9-16; for Nabu-apal-iddin, VR60-61; for Assurnazirpal, Annals, IR17-26; for Shalmaneser II., Bl. Ob., in Abel und Winckler's *Keilschrifttexte*, pp. 7-12, also Monolith, IIIR7-8; for Šamši-ramman, IR33-34; for Ramman-nirari III., IR35 Nos. 1 and 3; the Synchronous Hist., in Winckler's *Untersuchungen*, p. 148 and ff.; for Tiglath-pileser III., IIR67 and IIIR9,2; for Sargon, Winckler's *Keilschrifttexte Sargons*, vol. 2, pp. 30-36; for Sennacherib, Prism inscript., IR37-42; for Esarhaddon, IR45-47 and IR50; for Assurbanipal, Rassam cyl., VR1-10; for Šamaššumukin, Cyl., Biling., and Letter

1. The longer form in *ûni* is employed almost exclusively in the first stem (I. 1 Pe'al). The total number of cases found of the form in *ûni* was 140. Of these, 118 were of stem I. 1: for example, *îš-šu-u-ni*, VR2, 118; *îš-bat-u* (var. *ba-tu-nim-ma*, VR1, 129).

2. The verbs occurring with this longer form are mainly weak verbs. Of the 140 occurrences of the form in *ûni*, 109 were weak verbs: for example, *il-li-ku-û-nim-ma*, VR2, 87; *il-ku-ni*, IR24, 35; *ik-bu-ni-im-ma*, No. 7, Rev. 7, in *Thontafelfund von El Amarna*.

3. The form in *ûni* is seldom used with suffixes. Of the third masculine plural, 87 cases with suffix were found; 10 of these were in *ûni*, and 77 in *û*. Examples of the longer form with suffix are: *û-tir-ru-ni-šu*, VR5, 34; *ub-lu-ni-šu*, IR18, 76.

4. The use of the form in *ûni* does not appear to be influenced by syntactical considerations.

It is possible that the termination *ûni* had an old rhetorical function which has survived in certain verbs. We have seen that it occurs most frequently with stem I. 1 (Pe'al). As this is the light stem, and the other stems are increased in various other ways, may this not have been a method of strengthening the stem? Moreover the form in *ûni* has been retained mainly in weak verbs. This fact leads to the conjecture that one of the functions of the *ûni* termination was to preserve more nearly the normal number of syllables or to compensate for the loss of a weak letter. Naturally in the course of time the original force and significance of the ending was lost, and we find such forms as *ipparšidûni* as well as numerous other strong roots with the termination *ûni*.

A point of some interest in this connection is the relation of the Assyrian ending *ûni* to the plural termination *ûn* in Hebrew, Aramaic, etc. In the perfect, *ûn* occurs more or less frequently in Samaritan, Syriac, and later Targumic,* but only three times in Hebrew.† In the imperfect, the Arabic (*ûna*) and Aramaic have retained it regularly; the

to Assurb, in Lehmann's *Šamašsumukin*, Taf. II., VIII., IX.; for Nebuchadrezzar, the East India House inscript., IR59-64, Grot. cyl., IR65-66, Build. inscript. of Nin-Karrak. in Abel und Winckler's *Keilschrifttexte*, p. 23 and ff., and Borsippa inscript., IR51 No. 1; for Nabonidos, Ur inscript., IR69, also IR68 No. 1, VR63, and VR64; for Cyrus, Clay cyl., VR35.

Further: the Bab. Chron., in Abel und Winckler's *Keilschrifttexte*, pp. 47-48; the Bab. Creation Epic, in Delitzsch's *Das Babylonische Weltschöpfungsepos*; the Flood-legend, in Haupt's *Das Babylonische Nämrodepos*, pp. 134-143; of the El-Amarna tablets, those of Buraburiyash and Aššuruballit Nos. 2, 3, 4 in *The Tell El-Amarna Tablets of the British Museum*, and Nos. 4, 6, 7, 8, 9 of the Berlin collection, in Winckler's *Der Thontafelfund von El Amarna*.

* See Böttcher's *Ausführliches Lehrbuch der Heb. Sprache*, §930.

† See Driver's *Tenses* (3d ed.), p. 6, Note 1. *יָנִי*, Dt. viii. 3, 16, and *יָנִי* Is. xxvi. 16. This last, Stade, *Gram.*, §411a, rejects as suspicious. It is apparently a textual error. *יָנִי*, Is. xxix. 21, is evidently an imperfect.

Hebrew, some 313 times.* In Hebrew prose, the form in *ân* is more common in the pre-exilic literature, the general principle being as follows: the older the book, the more frequent is its use; and the absence of the form is a mark of later date.† There does not seem to be any defined law of growth or degradation traceable in the history of the form in Assyrian. In the El-Amarna tablets examined, the forms in *ânî* were in predominance over those in *ân*, and a further investigation of this material from so early a period (15th century B. C.) might yield some significant results. The use of the termination *ânî* in Assyrian and that of *ân* in Hebrew have this in common, that they occur mainly with the *first* stem, and seldom with suffixes.

The following is a list of verbs which occur most frequently in the texts examined with the termination *ânî*, in the order of their frequency: *abâlu*, *tibû* (14 times in *ânî*); *alâku* (12 times); *arâdu*, *târu* (9); *našû*, *šabātu* (7); *ašû*, *kibû*, *likû* (5); *paršadu* (4); *ilû*, *iribu*, *dakû*, *šakânu*, *šarâku* (3).

4. On the 'Frog-hymn,' Rig-Veda vii. 103, together with some remarks on the composition of the Vedic hymns; by Professor M. Bloomfield, Johns Hopkins University, Baltimore, Md.

At the meeting of the A. O. S. in October, 1890, the writer presented a paper entitled, 'On a Vedic group of charms for extinguishing fire by means of water-plants and a frog,' an abstract of which appeared in the Proceedings of that meeting; the subject was afterwards treated more fully in the second series of 'Contributions to the interpretation of the Veda,' Amer. Journ. Phil. xi. 342 ff.‡ The primary object of the article was the interpretation of RV. x. 16. 13, 14, and sundry related stanzas, but incidentally there came to light a wide-spread custom of employing a frog and certain water-plants as symbols of water, as instruments for quenching fire, and as a means of producing water where formerly there was none. Ethnologically speaking, this is the simplest kind of folk-lore, and it would have required no special emphasis but for the fact that it helped us to discover in a considerable number of more or less vaguely understood Vedic passages the plainest kind of ordinary meaning.

An interesting modulation of this theme is the employment of the frog as a cure for fever. Stanza 2 of AV. vii. 116, a charm against *takman* or fever, reads: 'May (the *takman*) that returns on the morrow, he that returns on two (successive) days, the impious one, pass into this

* See C. H. Toy, *The Hebrew Verb-termination un*, in the *Trans. of the Am. Philol. Assoc.* for 1880, pp. 21-22.

† *Ibidem*, p. 34.

‡ The following additional passages, illustrating the matters there treated, may be noted: TS. v. 4. 2. 1; vii. 4. 18. 2; TB. iii. 9. 5. 4; MS. iii. 3. 3. 6; 12. 19; VS. xxiii. 10; QB. xiii. 8. 3. 13; ÂÇ. ii. 12. 2; x. 9. 2; LÇ. iii. 5. 13; Rigvidhāna iv. 11. 1.

frog.' This prayer is supported symbolically at Kāuṣ. 32. 17 by fastening a frog beneath the bed of the patient and rinsing the patient off, so that the water shall wash the fever down upon the frog; cf. especially Keçava to the passage, and see the treatment of the hymn in our forthcoming translation of the AV. in the Sacred Books of the East.

Aside from these uses the frog occurs in the accessible Vedic literature, barring casual mention, only in the so-called frog-hymn, RV. vii. 103, and a few scattered but closely related stanzas in the Khila of the RV. itself, in AV. iv. 15. 13 fl., and in the Suparṇākhyāna ix. 3. A literal translation of RV. vii. 103 is as follows:

1. The frogs that have lain (quiet) during the year, (like) Brāhmaṇas devoted to a vow (of silence), have uttered their voice that has been quickened by Parjanya (the god of rain).

2. When the celestial waters came upon them,* lying like a dry (water-) skin in the pool, then the voice of the frogs rises in concert, as the lowing of cows with calves.

3. When at the arrival of the rainy season it hath rained upon them plagued by thirst and longing, then uttering (the sound) *akkhala*,† as a son to his father one approaches the other croaking.

4. One of them takes hold of the other when they have rejoiced at the pouring forth of the waters, when the frogs sprinkled by the rain did skip, when they mingle their voices, the speckled and the green.

5. When they reply to one another's shouts as a pupil (repeats the words) of his teacher, then all that with them is like a paṭṭ lesson, when with loud croaking they shout upon the water.

6. One bleats like a cow, the other like a goat; one of them is speckled, the other is green; though of different shapes they own the same name, in many ways they modulate their voice when they speak.

7. Like Brāhmaṇas at the all-night soma-sacrifice (*atirātra*), chanting round about the full bowl (of soma), ye are about on that day of the year when the rainy season has set in.‡

* The text reads *enam* 'him.' The slight change removes the anacoluthon.

† βρεκεκεκξ κούξ κούξ. In Pañc. Br. xii. 4. 16 the croaking of the frogs is described by the verb *ākharoti* 'to utter the sound āṭ' (Scholiast, *maṇḍako vṛṣṭyanantaram āṭ ity evaṃ cābdam karoti*). Cf. also the Sāmāns bearing the title *āṣkāranidhana* (-*nīdhana*), Pañc. Br. viii. 1. 1; 2. 1; Ind. Stud. iii. 206; and see Weber, Festgruss an Rudolf von Roth, p. 136, note 4. [Cf. also the names of sounds (some onomatopoeic) of various creatures and things, ZDMG. xxxii. 734.—Ed.]

‡ *saṃfādhā* is to be taken as an adverbial instrumental from *saṃfādh* 'accomplishment, success.' The assumption for this one place of a stem *saṃfādhā* (Pet. Lex., Grassmann, and Hillebrandt, Vedachrestomathie) is uncalled for. We have avoided the anacoluthon between *eṣām* and *vādathana* by rendering the latter as a third person.

§ There is no fun and no conviviality in all this. The Brāhmaṇas do not drink the soma at the *atirātra*; it is sacrificed at regular intervals, each libation being preceded by the chanting of holy hymns. Four libations are poured at three dif-

8. As Brāhmaṇas over the soma they have raised their voices, performing their annual song; as Adhvaryus (serving priests) that have sweated over the pots of hot milk (*gharma*)* they are (all) in evidence, none of them are hidden.

9. The divine order of the twelve-month† they observed: these men do not disregard the season. Each year when the rainy season has arrived the heated pots (of heaven) are emptied out.‡

10. He that bleats like a cow, he that bleats like a goat; the speckled and the green one have bestowed upon us wealth; the frogs bestowing hundreds of cows shall extend (our) life at the thousand-fold pressing (of the soma).§

The hymn is 'late.'¶ It is the only hymn outside of the first and tenth books of the RV. in which occurs the word *brāhmaṇ*; the combination *akṣhālī-kṣṭya* represents the only instance in the RV. of the change of final *a* to *i* in composition with the verb *kar* (and *bhū*); cf. Whitney, Sk. Gr.² 1001a, 1003a. Ritual words are common: *atirātrā*, *gharmā*, *adhvaryū* in addition to *brāhmaṇ*. The expression *vratacārīn* (st 1 = AV. iv. 15, 18), common in the later literature, occurs nowhere else in the Rik or Atharvan.

Stylistically and from a literary point of view the composition is mediocre. Not that it does not lose somewhat, by a prose rendering, in what we at least feel to be a certain naïveté, directness, and quick-

ferent points of the night, and silence reigns between these points. As the chants of the Brāhmaṇas indicate that the bowl has been filled anew, thus the croaking of the frogs indicates that the pool has been filled by the rains of the monsoon. See Haug, *Brahma und die Brahmanen*, p. 41 (cf. *Aitareya-Brāhmaṇa*, Translation, pp. 263 ff.). The word *sāras* is a *vox media* 'pool,' and 'bowl.'

* *Sāyapa*, *gharmiṇo gharmena pravargena carantaḥ* 'performing the pravargya-ceremony.' At the pravargya-ceremony the priests empty pots of milk which are heated before they are emptied. Similarly the frogs have sweated during the hot season. The word *gharmiṇo* thus harbors a double entente: 'heated by the pots of milk' (in relation to the priests), and 'affected by the hot season' (in relation to the frogs). Cf. Haug, l. c., p. 42; Hillebrandt's *Vedachrestomathie*, under *gharmā* and *gharmīn*; Oldenberg, *Die Religion des Veda*, p. 450, note.

† *Sāyapa*, *dvādaśamāsātmakasya saṁvatsarasya*. Jacobi, Festgruss an Rudolf von Roth, 'of the twelfth month.'

‡ The simile between the heated pots of the priests and the hot season is continued: the heated pots are the heated heavens which pour forth their rain.

§ Doubtless again with double meaning: 'the generating of thousands of plants.' Thus *Sāyapa*, *saḥasra-saṁkhyāka oṣadhayaḥ sāyante*.

¶ The Pet. Lex., s. v. *atirātra*: 'Das lied ist zu den jüngsten zu zählen.' What is meant by late is, that a given hymn does not accord with the stereotyped, hieratic language of the family-books, the books of the soma-sacrifice, but approaches the less esoteric more popular diction of the AV., the Brāhmaṇas, and the classical language. The distinction exists, but it is one of dialect and style, rather than chronology. Many of the criteria employed for chronological purposes are obviously dialectic, e. g. 'late' *hṛdyāmi* = Avest. *zdayemi*; *sāra* = Avest. *haurva*; *karōmī*: *tarutē*, etc. Of this another time.

ness of movement in the original. As to that, different readers will differ in accordance with their individuality and the scope of their observations of matters Hindu. The hymn is in our view thoroughly conventional: it is full of repetitions, and extreme in its employment of the catenary arrangement of its stanzas. The very opening in the livelier anuṣṭubh metre, continuing with the more stately triṣṭubh-jagatī, is one of the standard devices of the AV.* Two clumsy anacoluthons in sts. 2 and 5 contribute to the characterization of the literary standard of the hymn, which is no higher than that of scores of Atharvan hymns. It has been suggested frequently and denied just as frequently that there is in the composition humor, nay that it is a satire on the Brāhmaṇas to compare their doings with those of frogs. As regards the latter point, we must regard it as extremely unlikely, in view of the attitude of the Vedas as a whole towards their priesthood. What is more to the point, however, is that the hymn obviously breathes the spirit of anxious conciliation: the frog, the symbol of eagerly craved water, is no joking matter, and the comparisons with the Brahmins and the sacred rites are begotten of the desire to praise, and not to disparage.

But aside from and above these considerations stands the broad question that must be asked for every Vedic hymn, namely, whether its composition was utilitarian or bellettristic. Shall we conceive this poetry as the product of the mildly frenzied rhapsodist among the people, or, perhaps, as the child of the muse of some Rāja's poet laureate 'given to infinite tobacco,' as he walks along the jungle in the cool of the evening, at the opening of the rainy season, eager to bag some good subject for the delectation of the court of his patron? Or shall we let the Vedic writings continue their tale of a literature, practical, tendential, everywhere 'on the make?' The Vedic Hindus, to judge by their literature, were the most practical people of ancient times. This literature of a hundred works more or less, the Upanishads not excepted, has positively no aim in view except personal advantage, the favor of the gods, the granting of wishes, the destruction of enemies, and that continues clear down to the pessimistic Upanishads which pander to the desire for emancipation from the round of existences. The Rig-Veda is confessedly in part made of the same stuff. Anent other parts there are those whose literary feeling does not permit them to follow out the consequences of all that part of Vedic history which is clear. Here and there the sordid mass appears leavened by true beauty of conception, fineness of observation, good style, and all the other paraphernalia of literary composition which we of modern times are accustomed to see at work more or less divorced from any practical consideration. Why not? As if a hieratic literature excluded by its very terms the operations of literary taste and literary canons. The Vedic poets themselves boast that their poems are 'well-hewn,' and so they are in many cases. After

* Cf. AV. i. 29; iv. 16; vi. 49. The same effect is produced by introducing an anuṣṭubh-hymn with a gāyatrī, ii. 32; iv. 12, and probably also by placing a stanza in long metre at the head of one in short metre, e. g. ii. 4; vi. 111.

all the crust of priestly conventionalism has been pared off, there remains in the Vedic mantras enough beauty to make them attractive as a phase of the world's literature. But this incidental merit has nothing whatever to do with the prime object of their composition, the pursuit of some priestly object, not necessarily sordid, not necessarily devoid of true elevation of spirit. All preachers are not Peters of Amiens nor Savonarolas, but must be content to serve their religions, while maintaining that the laborer is worthy of his hire; and all scientists are not Galileos, but demand salaries as high as the market allows: and yet, after all, the spiritual guidance of civilized peoples and the great bulk of scientific advance are on the whole safe in the hands of people who are no less dependent upon baksheesh than the poet-priests of India.

The finikin literary *non possumus*, born of modern sensitiveness, of any one who feels that somehow he is individually incapable of imagining so good a literature—good in his eye, not necessarily in the eye of others—to be composed by priests for priestly purposes, may be respected as a personal frame of mind, but it is wholly otiose as an historical argument. The literary quality of the RV. might have been infinitely higher than it appears to its most enraged admirer, and yet be a purely hieratic performance, provided only that the priests themselves had risen to a correspondingly high plane of literary perception. To deny peremptorily that they could have so risen, though at the same time having an eye to the practical side of their calling, and the practical applicability of the products of their muse, is a dictatorial *machtspruch* which may inspire awe for a moment, but will not cause any one to flinch in his endeavors to fix more clearly the outline of Hindu antiquity in the light of those of its data which are already clear. This is the homespun method which has finally commended itself in all philologies, and Hindu philology, too, is, on the whole, in good hands. The burden is now on the other shoulder, and he that assumes for a given Vedic hymn a purely literary origin, he who denies that a given hymn was composed with reference to some definite occasion (*gelegenheitsdichtung*) and for some practical purpose, may no longer be allowed to fortify himself behind shifting æsthetic estimates. That is begging the question. It may be difficult, yea impossible—though that can be decided only in the future of Vedic philology—to point out the precise occasion in the case of one or another hymn. The great mass of the hymns are obviously practical, not only in their application but by the evidence of their innermost structure, and until it is proved that a given hymn is not so we shall be repaid by searching every time for the occasion and the purpose to which its origin is due.

This *oratio pro domo* on the part of the expounder of the frog-hymn will seem in the end unnecessarily fervent, and it would indeed be altogether superfluous if it were not still very necessary to draw the moral from what is simple and plain for the future usufruct of those Vedic hymns that are vague and nebulous, or do not at any rate betray on the face of them the exact motive of their composition. The frog-hymn is a

rain-charm, in style and purpose no better than many other productions of the medicine-man and the weather-maker. The chief interest of the hymn is to be found in the fact that it completes the chain of folk-lore beliefs and practices elaborated in the article quoted above. The frog in his character of water-animal par excellence quenches fire, produces water where previously there was none, is the proper repository for fever, and finally is associated with the annual appearance of rain in the rainy season. One will look in vain in the accessible Vedic literature for any mention of frogs—and they are mentioned quite frequently—which fails to suggest or state outright this practical view of the animal.* The frogs, too, are everywhere taken seriously; their comparison with the Brāhmaṇas in vii. 103 is a bit of nice diplomacy, intended as a captatio benevolentiae of the frogs, not as a satire upon the priests engaged in the difficult performance of the all-night sacrifice (*atirātrā*), or the still more arduous manipulation of the heated pots (*gharmā*). That this is so, we may gather from Harivaṇṣa, Viṣṇuparvan 95. 23 = 8803, a passage which is clearly modelled after sts. 7 ff. of our hymn, and which by its very terms cannot be intended as a satire upon the Brahmins: 'The frog having lain asleep eight months croaks with his wives, as a Brahman devoted to the precious and true law recites hymns surrounded by his pupils.' Langlois in his translation remarks aptly, that according to our customs nothing would be quite as impertinent as the comparison of a respectable ecclesiastic with a frog, but the Hindus were not conscious of any taint of impiety in this *rap-prochement*. This attitude seems to us queer, but the Hindu is practical, and the frogs have water to give. The Hindu's worship of the to us intensely repulsive animal with forked tongue, 'the toothed rope' as he himself at times calls the serpent, is still more grotesque. And yet even the modern Hindu housewife does not attack an intruding serpent with the broom-handle, but places milk before him, her hands folded in the attitude of a suppliant.

The present hymn betrays its purpose most plainly in its last stanza, which contains, as in hosts of other charms, the true point, the *knall-effect*, of the hymn. The statement is made in the so-called prophetic aorist, the things desired are stated as having already taken place:† that the frogs are able to bestow wealth, cattle, and long life by no other inherent virtue than that of rain-making, needs hardly to be pointed out.

Aside from the evidence from within, the charm is immediately preceded in the RV. itself by two hymns that are rain-charms. They are addressed directly as prayers to Parjanya, the rain-god, and their char-

* Cf. especially the familiar passage, RV. ix. 112. 4, where the natural affinities of various kinds of men, animals, and things are described graphically; the poet winds up with the statement, *śepo rōmaṣvantāu dhedaū, vār in maṇḍāka śchati*. See also Maitr. Up. i. 4; vi. 22.

† The commentators feel this: in all such cases they render the aorist by the imperative. Thus Śāyana here, *adad*, i. e. *dadātu*. Cf. also Delbrück, Syntactische Forschungen ii. 87.

acter may be understood from stanza vii. 101. 5 as a specimen : ' May this prayer penetrate into the heart of the self-sovereign Parjanya, may he take delight in it : refreshing rains shall be ours and plants with goodly fruit protected by the gods.' The only difference between these hymns and the frog-hymn is that in the latter the frogs in their capacity as producers of water, are, as it were, the agents of the rain-god upon earth, and the prayer is shifted to them.

The khālikāni sūktāni contain a later addendum to the hymn which shows how clearly it was understood at that time in the sense of a rain-charm : ' Join the chorus, O female frog ; announce the rain, O tadpole ; stretch out thy four feet, and paddle in the middle of the pool.' This stanza appears in A.V. iv. 15. 14, a very lengthy and conglomerate rain-charm,* preceded by the first stanza of the frog hymn, and followed by another stanza in which *khanvakhā* and *khāimakhā*, two fanciful frog-females,† are again implored to produce rain (*varṣān vanudhvam*). Again both the first stanza and the khila of our hymn occur in Yāska's Nirukta ix. 6, 7, and Yāska explains, ' Vasiṣṭha desiring rain praised Parjanya, the frogs acclaimed him. He perceiving the acclaiming frogs praised them with song. That is what this stanza means.‡ Clearest of all is a passage in the Suparṇākhyāna ix. 3, not concerned directly with the frogs at all, and certainly serious. It describes the conjuring of a great storm in vivid language : ' Shout, thunder, reach the clouds ; these waters of thine shall be level with the mountain-tops. . . Undefined, wholly water, the shore shall be ; the frog-female shall croak all the night. (The winds) shall milk the cloud (cow) whose trail drips with milk, the wild beast shall come seeking firm land.' The Suparṇākhyāna is a very interesting composition, a kind of an addendum (khila) to the RV., at any rate, so strongly reminiscent of the RV. as to leave one in doubt not infrequently whether a certain passage of it is to be regarded as a Vedic mantra or not. The fact that it weaves two of the main ideas of the frog-hymn, the croaking frog, and the all-night performances, into a highly poetic account of a storm, shows at any rate what its composer conceived that composition to be. Finally the hymn was still in use in India in 1871, when the late Professor Haug reported that ' in times of great drought, when the eagerly expected rain will not come, twenty or thirty Brāhmaṇas go to a river, and recite this and the preceding hymn.§ This is again the ancient reliance upon the frog, the Vedic quencher of fire, heat, and fever, a very trident in the hands of the ancient sorcerers.

* Cf. Kāṇ. 103. 3, *sam ut patantu* (A.V. iv. 15) *pra nabhasva* (vii. 18) *itī varṣir juhoti*.

† Obviously personifications of another of the many onomatopoeic attempts to render the croak of the frog. It is worth noticing that throughout the varied frog-charms with which we have dealt, the female (*maṇḍāktī*, *maṇḍāktikā*) rather than the masculine (*maṇḍāka*) is often chosen as the emblem of moisture. This is sound physiology as well as folk-lore.

‡ Cf. Śaṅguruṣiṣya, p. 135 ; Sāyaṇa in the introduction to RV. vii. 103.

§ Brahma und die Brahmanen, p. 12 (cf. also the note, p. 40).

5. The meaning of the compound *atharvāṅgirasah*, the ancient name of the fourth Veda; by Professor Bloomfield.

In general the fourth Veda is designated in ancient times by the compound *atharvāṅgirasah*. Quite frequently, however, the two members of the compound are separated, so that each is mentioned by itself, but always in more or less close conjunction with the other. This shows that the compound is not a congealed formula, but that the texts are conscious of the fact that each has a distinct individuality, and a right to separate existence. In other words, the AV. consists of *atharvan* and *āṅgiras* matter, and the question arises what elements in the make-up of this Veda these terms refer to. The answer may be given with a considerable degree of certainty: the term *atharvan* refers to the auspicious practices of the Veda, the *bheṣajāni* (AV. xi. 6. 14), those parts of the Veda which are recognized by the Atharvan ritual and the orthodox Brahmanical writings as *śānta* 'holy,' and *pāuṣṭika* 'confering prosperity'; the term *āṅgiras* refers to the hostile sorcery practices of the Veda, the *yātu* (Çat. Br. x. 5. 2. 20), or *abhicāra* which is terrible (*ghora*).

In J.A.O.S. xi. 387 the writer pointed to the existence of this distinction at Vāit. Sū. 5. 10 (cf. also Gop. Br. i. 2. 18), where two lists of plants are differentiated, one as *ātharvanyah*, the other as *āṅgirasyah*. The former refers to a list of plants catalogued at Kāuṣ. 8. 16 and described as *śāntāḥ* 'holy'; the second list is stated at Vāit. Sū. 5. 10 itself, and described as *āṅgirasa*: the name of the last of the list, *nir-dahanī* 'burning forth,' proves that they were employed in unholy sorcery practices (*ābhicārika*).^{*} The adjective *āṅgirasa* is in general in the ritualistic texts of the AV. a synonym of *ābhicārika* (Kāuṣ. 14. 30; 47. 2, 12; Ath. Pariç. 3. 1); hence the fifth *kalpa* of the AV., usually known as *āṅgirasakalpa*, bears also the names *ābhicāra-kalpa*, and *vidhāna-kalpa*; see *ibid.* 376 ff.

Of non-Atharvanic texts, the Rig-vidhāna iv. 6. 4 has the following *çloka*: 'He against whom those that are skilled in the *Āṅgirasakalpas* practice sorcery repels them all with the *Pratyāṅgirasakalpa*.† The term *pratyāṅgirasa* is the exact equivalent of *pratyābhicāraṇa* 'counter-witchcraft' (AV. ii. 11. 2), and the *kṛtyāpratiharāṇāni*, Ath. Pariç. 32. 2 (cf. Kāuṣ. 39. 7, note). The texts of the sort called *ātharvaṇapratyaṅgirākālpam* (! see Ind. Stud. i. 469), *pratyāṅgirātatva*, *pratyāṅgirāpañcāṅga*, and *pratyāṅgirāsūkta* (Böhtlingk's Lexicon), probably deal with the same theme; at any rate we may regard it as certain that the words *āṅgiras* and *āṅgirasa* are reflected by the ceremonial literature in the sense of *ābhicāra* and *ābhicārika*.

Far more important is the evidence of certain texts of greater antiquity and higher dignity, which have occasion to mention the Atharvan incidentally, and enunciate clearly this two-fold character of the Veda.

^{*} Cf. AV. iii. 2. 5; vii. 108. 2; ix. 2. 4; 5. 31; xiv. 2. 48.

† Cf. also the following *çlokas*, and iv. 8. 3; see Rudolf Meyer's preface to his edition of the Rig-vidhāna, p. xxxi.

They make the very same distinction between *atharvan* and *āṅgīras* that appeared above, Vait. Sū. 5. 10. At Qāṅkh. Qr., the fourth Veda figures in its double character as *atharvan* and *āṅgīras*; here we find *bheṣajam*, i. e. 'remedial charms,' recited from the *atharvan*; and *ghoram*, i. e. *ābhicārikam* 'sorcery,' from the *āṅgīras*. Similarly in Āśv. Qr. the *ātharvaṇo vedaḥ* and *āṅgīraso vedaḥ* are treated individually, and again the former is correlated with *bheṣajam*, the latter with *ghoram*; cf. also Çat. Br. xiii. 4. 3. 3 ff. Indirect, yet significant testimony that this double character of the AV. was clearly established in Brahmanical times may be deduced from the formation of the names of two apocryphal teachers. One is Bhiṣaj Ātharvaṇa, Kāth. S. xvi. 3 (Ind. Stud. iii. 459); the other is Ghora Āṅgīrasa, Kāuṣ. Br. xxx. 6, etc. The formation Bhiṣaj Ātharvaṇa is illustrated further by Çaṁhyu Ātharvaṇa, Gop. Br. i. 2. 18; by Pañc. Br. xii. 9. 10, *bheṣajam vā ātharvaṇāni*, and xvi. 10. 10, *bheṣajam vāi devānām atharvāṇo bheṣajyāyāi* "vā 'riṣṭyāi"; and by the expression *atharvabhīḥ cāntaḥ*, Kāuṣ. 125. 2.* These names never, as far as is known, occur in inverted order: there is no Ghora Ātharvaṇa, and no Bhiṣaj Āṅgīrasa; they reflect perfectly the individual character and the individual function of the two members of the compound *atharvāṅgīrasaḥ*.

It seems now, further, that the texts of the Atharva-saṁhitā mark this same distinction with no uncertain touch. At AV. xi. 6. 14 four Vedic mantra-classes are indicated by the expressions *īcaḥ*, *sāmāni*, *bheṣajā(ni)* and *yājñāṇi*. The choice of the word *bheṣajā* is certainly one-sided and eclectic. The passage appeals to the auspicious aspect of the holy texts, and naturally chooses the auspicious side of the Atharvan also. Its precise complement is Çat. Br. x. 5. 2. 20 where *yātu* 'sorcery' and the *yātuvidaḥ* 'those skilled in sorcery' are the representatives of the fourth Veda. The *bheṣajā* of the Atharvan passage and the *yātu* of the present passage make up together what is embraced in the name *atharvāṅgīrasaḥ* (AV. x. 7. 20). Moreover the Saṁhitā exhibits a decided predilection, bordering on rigorous distinction, for associating the term *āṅgīrasa* with aggressive witchcraft, or the practice of spells (*krtyā*). Thus viii. 5. 9 (*krtyā āṅgīrasāḥ*): x. 1. 6; xii. 5. 52; cf. also vi. 45. 3=RV. x. 164. 4. In xi. 4. 16 (cf. also viii. 7. 17) the distinction between Atharvanic and Āṅgīrasic plants appears again, not, however, in a connection which conveys of necessity the contrast between 'holy' and 'witchcraft' plants. But it may do so, precisely as is the case in Vait. Sū. 5. 10. Cf. also AV. xix. 22. 1, 18; 23. 1; Gop. Br. i. 1. 5, 8; 3. 4; Pāṇini v. 2. 37.

As regards the chronology and cause of this differentiation of *atharvan* and *āṅgīras* the texts are apparently wholly silent. The association of both names (and in the ritual texts of the AV. of the name *bhṛgu* also) with the texts and practices of the fourth Veda may be sought in the character of these mythic beings. They are fire-priests, fire-churners, and the Atharvanic rites as well as the house-ceremonies

* Cf. also Çānti, the wife of Atharvan, Bhāg. Pur. iii. 24. 24, and Wilson's translation of the Viṣ. Pur., vol. i. pp. 110, 200.

in general center about the fire, the oblations are into the fire. Fire-priests, in distinction from soma-priests, may have had in their keeping these homelier practices of common life. But whence the terrible aspect of the *Āṅgiras* in contrast with the auspicious *Atharvans*? In RV. x. 108. 10 *Saramā* threatens the *Paṇis* with the terrible *Āṅgiras* (*dāṅgirasas ca ghōrāḥ*). This statement, wholly incidental as it seems to be, is, of course, not to be entirely discarded. More important is the fact that *Brhaspati*, the divine *Purohita*, is distinctly *āṅgirasa*. In *Kāuṣ.* 185. 9 *Brhaspati Āṅgirasa* appears distinctly as the representative or the divinity of witchcraft performances. In the *Mahābhārata* he is frequently called *āṅgirasān gṛeṣṭhaḥ*. In his function of body-priest of the gods it behooves him to exercise those fiercer qualities which are later in a broader sense regarded as *Āṅgirasic*. Thus RV. x. 164. 4=AV. vi. 45. 3 certainly exhibits this function of the divine *purohita*. The composer of AV. x. 1. 6, when he exclaims, '*Pratīcīna* ('Back-hurler'), the descendant of *Āṅgiras*, is our overseer and chaplain (*purohita*): do thou drive back again (*pratīcīḥ*) the spells, and slay yonder fashioners of spells,' has also in mind the divine *purohita*. The stanza foreshadows the later formation *pratyāṅgiras*, discussed above. We look in vain, however, for statements of the reason why the word *atharvan* should be especially associated with *gānta* and *bheṣaja*, and must assume for the present that this was accomplished by secondarily contrasting it with *āṅgiras*, after the sense of *ghora*, *ābhicārika* had incrustated itself over it.* The uncertainty of all this does not endanger the result that at a comparatively early time the terms *atharvāṇaḥ* in the sense of 'holy charms,' and *āṅgirasāḥ* in the sense of 'witchcraft charms,' joined the more distinctively hieratic terms *ṛcaḥ*, *yajūṣi*, and *sāmāni* as characteristic types of Brahmanical literary performances. But this distinction was at a later period again abandoned: in the end, the name *atharvan* and its derivatives prevail as designations of the charms and practices of the fourth Veda, without reference to their strongly diversified character.

6. The root *kar*, *skar*; by Professor E. W. Hopkins, Yale University, New Haven, Conn.

The supposititious root *skar* is accepted rather doubtfully by philologist and etymologist alike.† There is good reason for the suspicion with which this form of the root is regarded. From a comparative point of view, the root would be quite unique in showing *sk* in Sanskrit and in no other language. Other roots with assured initial *sk* all show the sibilant somewhere, as in the case of *skand*, *scando*, *scinnim*; *skabḥ*, *skoba*, *scabellum*; *skar* (Avestan), *skāpō*; *skū*, *skīros*, *scutum*,

* A dash of popular etymology may have helped on the process: *a-tharvan* 'not injuring'; cf. the root *thurv* in the sense of 'injure' *Dhātup.* 15. 62, and perhaps *MS. ii.* 10. 1. Also the roots *tārv* and *dhārv* with similar meanings.

† Whitney, *Grammar*, § 1087 d; Fick, *Wörterbuch*, i 4, p. 24.

obscurus, *sky*.* But *skar* has not even an Avestan parallel. To be sure, Fick attributes *skarana* in *gareñō-skarana*† (Vd. 14. 7) to *kar*, herein following Justi; but Professor Jackson calls my attention to the fact that *skarana* is now identified with the Persian *sukar*, 'coal'—so by Horn, *Grundriss der neupersischen Etymologie*, p. 163; Geldner, KZ. xxv., p. 566.

On the other hand the rapid growth of *skar* at the expense of *kar* in the post-Vedic language naturally raises the question whether this encroachment cannot be traced to its beginning. Such forms as *sah-caskara*, *apaskara*, *upaskara*, *viskara* (*viskara* = *vikara*) are plainly an extension of the earlier use of *skar* (almost confined to cases where the root is combined with *pári* or *śam*) and suggest of themselves that *s* is a parasitic growth.

We can summarize this spread of the sibilant very easily. Till the period of the Rig-Veda no *s* is found (Latin *creo*, *cerus*, *ludicrum*; Greek *κράνω*; Slavic *kruci*; Lithuanian *kurti*; Avestan *kar*, *hakeret* = *sakft*). In the Rig-Veda, there are but two cases of *skar* in books ii.—vii., and these are not in the oldest part of this group (iii. 28. 2; v. 76. 2).‡ In the ninth book is one repeated word which occurs always in the same application, seven times as passive participle (*páriṣkṛta*), once as active participle, *páriṣkṛvān* *anīṣkṛtam*, 39. 2, and twice as a third plural with the same preposition (*páriṣkṛvanti*), 14. 2; 64. 23.§ It is here a stereotyped phrase. In the tenth book there are four occurrences of the participle, and the application is varied, though the combination with *pári* is preserved. Three of these four cases are quite certainly in late hymns or verses. In x. 32. 3 (a late verse), the *vahatús* is thus 'adorned'; in x. 85. 6, the *vásas*; in x. 107. 10 (praise of *dākṣiṇa*), the *végma*; in x. 135. 7, *ayám* (Yama). The only case where the verb is used freely occurs in this tenth book, withal in the hymn to Night, where (after a preceding *nir*) is found *askṛta*, x. 127. 3.

The tenth book, excluding this last form, has the same number of cases as has the eighth. The latter has *páriṣkṛta*, of *sóma*, 1. 26; and of *vīpra* (Agni), 39. 9; *sāṁskṛta*, of Indra, 33. 9; and *sūsāṁskṛta*, 66. 11 (a late verse). The last form occurs also i. 38. 12 (a Kāṇva hymn). There are thus twice as many cases in the tenth book as in ii.—vii.; and the Kāṇva collection has as many cases as has the tenth book.¶ The

* The palatal of *scand*, *candeo*, is not in the same category and probably the sibilant is not original (see below). The lost *s* of *krdhú* (*śkṛdhoyu*) is kept by the Greek and Lithuanian parallels. Compare Fick, *loc. cit.*, p. 142.

† Fick, *l. c.*, p. 184. Compare the other compounds (without *s*) *zaranyōkereta*, *hañkereta*; and see Geldner, KZ. xxv., p. 566; Horn, *Grundriss d. neupers. Etym.* §742.

‡ In the former case *páriṣkṛta* is used (of the *puroḍāś*); in the latter, *sāṁskṛta* (of *gharmá*).

§ The seven cases of the participle occur in ix. 43. 3; 61. 13; 86. 24; 99. 2; 105. 2; 113. 4 (all *páriṣkṛta*); and 46. 2 (*páriṣkṛtāśas*). The application in every case of participle and verb is to *sóma* (*śudū*, *hári*, etc.).

¶ It is to show this point that the data are here collected. If viii. is late there is historical progression in the spread of the form.

Brahmanic and later literature add *abhisam̐skar*, *upasam̐skar*, *pratisam̐skar*, *paryaskarot* (Pāṇini), etc.

A perfect parallel to the gradual growth of *skar*, as opposed to *kar*, is supplied by *skir*, *upaskirati*, which comes to light after the Rig-Veda; and perhaps by *skart* (= *kart*?) in *sam̐skṛtatṛā*. The former root (*s*)*kir* like (*s*)*kar* shows no sign of an *s* in Slavic, Lithuanian, or Teutonic parallels; * yet after the Rig-Veda, which also shows no *s*, the sibilant is found. The identity of *skart* and *kart* is doubtful.† Other parallels are to be found in some palatal roots. Parallel to the older *car* (*colo*, *κέρω*, *kelys*) of the Rig-Veda, stands *çar* in the later Māit. Saṁhitā (not noticed by Fick, s. v., i., p. 25). Even in RV. *çcam*, i. 104. 2, the metre shows that the preceding vowel is short and *cam* or *çam* (*κάρω*?) must be the form. In the case of *çcand* (*candeo*, *kadrū*), despite *cāniçcadat* and *çcandṛā*, strong evidence for the priority of the form *cand* is given by the fact that in the old compounds, *puruçcandṛā* and *viçvāçcandṛā*, the preceding syllables have to be read short in almost every case.

The cause† of the origin of *skar* may be more or less theoretical, but it is easy to see how the new form spread. The verb is compounded with especial frequency with *āvis*, *purās*, *mahās*, and also very commonly with *nis*(*iç*). An early case is *dukereta*, *duṣkṛtā* in Avestan and Vedic; so later we may compare the frequent nominal combinations, *namaskāra*, etc. An example may be taken from (Sanskrit) *avaskara* = *avas kara*. The temporal relation between the two forms is illustrated by Vedic (Sūtra) *upakaraya*, but Epic *upaskara* (*upaskāra*). It is noteworthy that, despite the regular RV. *sam̐skar*, the form *sam̐skṛti* still holds its own in TS. and later (see P.W., s. v.).

The form *āskra*, referred to this root by the lexicographers, has nothing to do with it. In each of the three instances where the word occurs it means 'united' (i. 186. 2; iii. 6. 4; vii. 43. 5). Now *kar* + *ā* never has this meaning. In Avestan, the combination means simply 'make.' In the Rig-Veda (*ākṛte gṛhé*, viii. 10. 1, etc.), it has either this meaning or, commonly, that of 'bring hither.' We cite as a typical example, x. 156. 2, *yāyā gā ākārāmahe sēnayāgne*, etc. There are half-a-dozen examples of *ā kar* in x. used in the same way. In the family books, compare viii. 77. 4: *dāçūçe 'rvāñcam rayim ā kṛñhi*. So too in x. 8. 9, where *gōnām ācakrāyās*, means only 'bringing to himself the cows'; while *ānākṛta*, i. 141. 7, is 'what one cannot bring to himself.' The meanings 'make,' 'form,' and 'bring hither' are still shown in Sanskrit *ākāra*, *ākāraṇa* (compare *ākṛti*, RV. x. 85. 5). As *kar* + *ā* never makes *āskar* in RV. and never means 'unite,' *āskra* 'united' cannot be from this root.

* Fick, *loc cit.*, p. 25.

† Avestan *kareta*, Greek *κέρω*, Latin *curtus*, render the identity more than questionable. The meaning (RV. vi. 28. 4) is quite uncertain.

‡ It is discussed in Professor Hopkins's article above, page 69.—Ed's.

7. On Mahā-Bhārata iii. 142. 35-45, an echo of an old Hindu-Persian legend; by Professor A. V. Williams Jackson, Columbia University, New York City.

The subject of the Yama-Yima legend has always been a fruitful field of study in the department of Indo-Iranian research. Parallels and resemblances, as well as contrasts and differences, between the Hindu Yama and the Persian Yima, or Jamshid, have often enough been discussed. The figure of the Vedic Yama, that mortal, the first to go the way of death and to point out the path for departed souls to follow, or, again, of that potent sovereign of the south, the stern judge hereafter, as found in the later Sanskrit literature, is familiar to every student of Indian antiquity. Consult, for example, Hopkins *Religions of India* pp. 128-135, 150 (Yama bibliography); Kaegi *Rig-Veda* (translation by Arrowsmith) pp. 67-70; and Spiegel *Arische Periode* pp. 243-256.

In Iranian legend the most marked feature of Yima's personality is that of the kingly ruler in whose reign the Golden Age of the world prevailed. Under his princely sway, as is described in the Avesta (Vd. ii. 4-19), the earth flourished and brought forth in abundance, the flocks and herds multiplied, mankind increased; for it was from Ahura Mazda himself that Yima received the command to 'further and increase the world' (Vd. ii. 4 *āaṭ mē gaēthāo frādhaya, āaṭ mē gaēthāo varedhaya*). The Vendidad further portrays the scene (cf. Geldner *K. Z.* xxv. 182):

'Then the earth became abounding,
Full of flocks and herds of cattle,
Full of men, of birds, dogs likewise,
Full of fires all bright and blazing.
Nor did men, flocks, herds of cattle,
Longer find them places on it.'

So overcrowded had the earth thus become! This excessive plenitude was due to the sovereignty of Yima, for neither sickness nor misery, disease nor death, existed as long as princely Yima ruled (Ys. ix. 4-5; Yt. v. 25-26, xv. 15, xvii. 28, xix. 31). Firdausi's picture of royal Jamshid's reign, as drawn in the *Shāh-Nāmah*, is worth placing beside this particular description in the present connection (cf. *Schahname*, ed. Vullers, i. p. 23 seq.; cf. Mohl *Le Livre des Rois*, i. p. 33-36 and especially p. 37, 'ainsi s'étaient passés trois cents ans, pendant lesquels la mort était inconnue parmi les hommes. Ils ne connaissaient ni la peine, ni le malheur, etc.' One of the Iranian characteristics, therefore, of Yima's reign was this plenitude of life and increase on earth.

In Indian literature, so far as I recall, special attention seems not to have been drawn to the increase of mankind and the over-population of the earth under Yama's beneficent sway. For this reason I call up to notice a passage in the Mahā-Bhārata that seems to show an Indian likeness to the Iranian idea. This will be but a point to add to others, in which, as has been shown for example by Darmesteter, Persia may serve to throw a side light upon the Mahā-Bhārata.

The passage in the *Mahā-Bhārata* (iii. 142. 35 ff = 10933 ff), to which I should like to direct attention, narrates the unprecedented deed of Vishnu, who, in his incarnation as a Boar, rescued the earth that had sunk into the nether regions in consequence of over-population. But how did this over-population come to pass? The text here rendered has the answer :

'In times gone by, the Krita Age, fearful, prevailed upon the earth, And (Vishnu,) Primal God Eterne, acted the part that Yama played; And when the all-wise God of gods acted the part that Yama played, No creature any longer died, but only births occurred on earth. Accordingly the birds began to multiply, and beasts, and kine, The cows and horses, and the deer, and all carnivorous animals; Likewise the human race began increasing, and to multiply By thousands and by myriads, just as a stream of water grows. Now, when on earth had come to pass this overcrowding terrible, The earth o'erburdened by the weight sank down a hundred leagues in depth, Suffering dire pain in all her limbs, and by the pressing weight distraught; The earth distracted then sought help of Vishnu, best of all the gods.'

Thereupon, as the story goes on to narrate, the divine Vishnu gives ear to the appeal uttered by suppliant earth; he becomes incarnate in the form of a Boar, and upon his shining tusk, as is recorded also elsewhere in Hindu mythology, he raises the trembling and afflicted earth out of the depths and saves her from disaster.

The point of resemblance to the Iranian legend, so far as relates to the increase of life under Yima, is patent. As soon as the God Supreme in the *Mahā-Bhārata* begins to play the rôle of Yama (*yamatvam kr*), death ceases, 'while the births are as usual' (thus *jāyate vā* is rendered in Roy's version—*vā = eva*); the flocks, the herds, the fowls of the air, and the whole race of man increase and multiply in numbers in the *Mahā-Bhārata*, precisely as the *pasu*, *staora*, *maśyāka*, *svan*, *vāi* are augmented in the Avesta; the earth becomes overburdened in the *Mahā-Bhārata*, exactly as the crowded throng in Yima's day no longer find for themselves places on the earth in the Avesta (*noif him gātvō viñden*). The means of relieving the difficulty, however, differ of course in the *Mahā-Bhārata* and in the Avesta, as the attendant circumstances themselves are somewhat different; but that the characteristic feature of the *yamatva* is plenitude, increase, augmentation, is evident enough.

A somewhat kindred idea of the nature of Yama's realm is preserved in his *sabhā* described in *Mbh.* ii. 8. 2-4, which bears a certain likeness to the Avestan *vara* of Yima, since 'neither cold nor heat, grief nor old age, hunger nor thirst' exist in it. Cf. Hopkins *Proceedings A. O. S.* May 1891, p. xciv, and April 1892, p. clxxix, on *ūrvā*; see also Lanman *Sanskrit Reader* p. 378. Fairly certain, however, it seems that the word *yamatva* above discussed, with all its association of increase and plenitude, receives new light when brought into connection with the Avesta, and the passage is of value because it preserves a reminiscence

of Yama's character, which, though familiar in Persia, seems otherwise to have been lost in Sanskrit literature, and thus the Mahā-Bhārata with its *yamatvam kṛ* etc. keeps for us an echo of an old Hindu-Persian legend, a bit of antique lore from the days of Indo-Iranian community.

8. On the iterative optative in Avestan; by Professor Jackson.

In a limited number of instances in the Avesta the optative mode is used iteratively to express a customary, repeated, wonted, or general action. Its employment is like that of the subjunctive of typical action which occurs quite commonly in Avestan. This iterative use of the optative is doubtless a development out of the potential force inherent in the mode; the optative, thus employed, assumes a significance almost like a present or a preterite. To English ears, a usage precisely parallel to this modal phase is familiar in such a periphrastic form as 'she would sit the livelong day and weep.'

The instances in the Avesta which I have been able thus far to collect are here presented. Some of them have already been noted by Bartholomae *Das altiranische Verbum*, p. 212. Other additions to the list may later be made. It will be observed that I have not been able as yet to quote for the list a positive occurrence of an iterative optative in the metrical Gāthās. Most of the examples cited are from later texts, but it will be noticed that half the instances are from metrical portions of the Avesta. It will likewise be observed in several of the occurrences that the optative stands in a relative or subordinate clause. The number of these latter might have been increased. Two of the instances of the iterative optative occur in sentences which denote a comparison. The material follows:

1. Av. (Gāthic prose) *athā athā cōiṣ ahurō mazdāo zarathuštrēm adakhšayaeta*—*athā athā cōiṣ daēvāiš sarem vyāmrviṭa*—*athā azemciṣ daēvāiš sarem vīmrūye* 'just as Ahura Mazda taught Zarathushtra and as Zarathushtra renounced connection with the Demons, so do I renounce connection with the Demons' (i. e. 'as Ormazd was wont to teach, etc.' *vdakhš*, cf. Ys. xliii. 15). Ys. xii. 5. But note that Caland, KZ. xxxiii. 302, takes *vyāmrviṭa* as preterite indicative.

2. Av. (prose) *zarathuštrō ahunem vairīm frasrāvayaṣ* (v. l. optative *frasravayōiṣ*)—*āpō vaiuhiṣ frāyazaēta*—*daēnām mazdayasnīm fra-orenaēta* 'Zarathushtra repeatedly chanted the Ahuna Vairya formula and worshipped the good waters and professed the law of the worshippers of Mazda.' Vd. xix. 2.

3. Av. *yō anu aēšām baresma frastarecēti yatha ašava jamāspa frastarenaēta ratufriš* 'whoso forms the bundle of barsom as the righteous Jamaspa was wont to form it (or would form it, if living), such a one is satisfactory to the priest' (Nirangistan 88, cf. Darmesteter *Le Zend-Avesta* iii. 136; also ed. by Darab Dastur Peshotan Sanjana p. . . .).

4. Av. (metrical) *míthrem vouru-gaoyaoitīm yō bādha ustāna-zastō | urvazemnō avaroif vācim* 'Mithra, the lord of wide pastures, who constantly raises (opt.) his voice joyously and with uplifted hands.' Yt. x. 73.

5. Av. (metrical) *karsnahe—fravašim yazamaide—yeñhe nmāne ašiš vanuhi | srira khšoithni fracaraēta* 'we worship the Fravashi of Karsna in whose house tarried (i. e. was wont to abide) Ashi Vanuhi.' Yt. xiii. 107. So also Caland.

6. Av. (metrical) *tūm zemargūzō akerenavō | vīspe daēva zarathuštra | yōi para ahmāf virōraodha | apatayen paīti āya zemā* 'thou, O Zarathustra, didst banish under the earth all the Demons that formerly in human shape were wont to fly upon this earth.' Ys. ix. 15.

7-10. Likewise in these general relative clauses: YAv. (metrical) *reñjaiti haomahe madhō | yō yatha puthrem taurunem | haomem vañ-daēta mašyō* | 'the intoxication of Haoma makes lively the man who greets (whosoever is wont to greet—opt.) Haoma like a young son.' Ys. x. 8;—Av. *yať tūm ainim avaēnōiš saocayaca kerenavañtem—āať tūm nišidhōiš gāthāo-srāvayō—frataire gātvō āonhanam fratarō-taire gātvō nišādhayōiš* 'as often as thou didst see another causing annoyance, then thou wouldst sit chanting the Psalms, and thou didst make me (thereby) to sit in a foremost place, who was already sitting in a forward place.' Hādhokht Nask ii. 13-14 (Yt. xxii. 13-14). Cf. Haug and West *Arda Viraf* p. 312.

9. "Universal" qualities in the Malayan language; by Dr. C. P. G. Scott, Radnor, Pa.

This paper set forth some of the characteristic phonetic, lexical, and syntactic features of the Malayan tongue, the general language of the Eastern Archipelago; pointed out their remarkable fundamental likeness in these respects to Latin and English; and sought to find the bases for the approximately "universal" use to which each of the three languages has attained within its historical and commercial sphere, in certain fundamental characteristics which concern universal grammar and logic, and in anthropology. There was also a skit at "Volapük" and "Spelin."

LIST OF MEMBERS.

1896.

The number placed after the address indicates the year of election.

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 His Excellency, OTTO BOEHTLINGK, 35 Seeburg St., Leipzig, Germany. 1844.
 Prof. GEORG BUEHLER, Univ. of Vienna, Austria. (8 Alser St., Vienna, IX.)
 Corresp. Member, 1876; Hon., 1887.
 Dr. ANTONIO MARIA CERIANI, Ambrosian Library, Milan, Italy. 1890.
 Prof. EDWARD B. COWELL, Univ. of Cambridge, England. Corresp. Member,
 1863; Hon., 1893.
 Prof. BERTHOLD DELBRUECK, Univ. of Jena, Germany. 1878.
 Prof. FRIEDRICH DELITZSCH, Univ. of Breslau, Germany. (78 Höfchen St.)
 1893.
 Prof. IGNAZIO GUIDI, Univ. of Rome, Italy. (24 Botteghe Oscure.) 1893.
 Prof. HENDRIK KERN, Univ. of Leyden, Netherlands. 1893.
 Prof. FRANZ KIELHORN, Univ. of Goettingen, Germany. (21 Hainholzweg.)
 1887.
 Prof. Sir MONIER MONIER-WILLIAMS, Enfield House, Ventnor, Isle of Wight,
 England. 1882.
 Prof. F. MAX MUELLER, Univ. of Oxford, England. Corresp. Member, 1854;
 Hon., 1869.
 Prof. THEODOR NOELDEKE, Univ. of Strassburg, Germany. (16 Kalbsgasse.)
 1878.
 Prof. JULES OFFERT, Collège de France, Paris, France. (2 Rue de Sfax.) 1893.
 Prof. EDUARD SACHAU, Univ. of Berlin, Germany. (12 Wormser St.) 1887.
 Prof. ARCHIBALD H. SAYCE, Oxford, England. 1893.
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 Ufer, N. W.) 1890.
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 Member, 1863; Hon., 1869.
 Prof. ALBRECHT WEBER, Univ. of Berlin, Germany. (56 Ritter St., S. W.)
 Corresp. Member, 1850; Hon., 1869.
 Prof. ERNST WINDISCH, Univ. of Leipzig, Germany. (15 Universitäts St.)
 1890. [Total, 20.]

II. CORPORATE MEMBERS.

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- Rev. CORNELIUS STEVENSON ABBOTT (St. Peter's Church), 347 State St., Brooklyn, N. Y. 1891.
- Dr. CYRUS ADLER, U. S. National Museum, Washington, D. C. 1884.
- Rev. J. L. AMERMAN, 25 East 22d St., New York, N. Y. 1898.
- NAGEEB J. ARBEELY, 45 Pearl St., New York, N. Y. 1898.
- Prof. EDWARD V. ARNOLD, University College of North Wales, Bangor, Great Britain. 1896.
- Mrs. EMMA J. ARNOLD, 29 Greene St., Providence, R. I. 1894.
- WILLIAM R. ARNOLD, 41 East 69th St., New York, N. Y. 1893.
- Dr. ROBERT ARROWSMITH, 236 Degraw St., Brooklyn, N. Y. 1884.
- Rev. EDWARD E. ATKINSON (Episcopal Theol. School), 1 Lawrence Hall, Cambridge, Mass. 1894.
- IRVING BABBITT (Harvard Univ.), 65 Hammond St., Cambridge, Mass. 1892.
- Prof. MARK BAILEY, JR. (State Univ. of Washington), 2209 4th St., Seattle, Wash. 1891.
- Miss ANNIE L. BARBER, 715 Fifth Ave., New York, N. Y. 1892.
- Prof. GEORGE A. BARTON, Bryn Mawr College, Bryn Mawr, Pa. 1888.
- Prof. L. W. BATTEN (Episcopal Divinity School), 4805 Regent St., Philadelphia, Pa. 1894.
- Rev. DANIEL M. BATES, St. Stephen's Rectory, Clifton Heights, Pa. 1890.
- Hon. TRUXTUN BEALE, Rancho del Tejon, P. O. Bakersfield, Kern Co., Cal. 1894.
- Prof. CHARLES W. BENTON, Univ. of Minnesota, Minneapolis, Minn. 1890.
- Rev. JOSEPH F. BERG, Ph.D., Montgomery, Orange Co., N. Y. 1893.
- Dr. HEINRICH C. BIERWIRTH (Harvard Univ.), 36 Weld Hall, Cambridge, Mass. 1893.
- Dr. WILLIAM STURGIS BIGELOW, 60 Beacon St., Boston, Mass. 1894.
- Prof. JOHN BINNEY, Berkeley Divinity School, Middletown, Conn. 1887.
- Rev. DAVID BLAUSTEIN, 20 Summer St., Providence, R. I. 1891.
- Prof. MAURICE BLOOMFIELD, Johns Hopkins University, Baltimore, Md. 1881.
- GEORGE M. BOLLING, Catholic Univ. of America, Washington, D. C. 1896.
- LESTER BRADNER, JR., 12 West 11th St., New York, N. Y. 1889.
- Prof. JOHN EVERETT BRADY, Smith College, Northampton, Mass. 1890.
- JAS. HENRY BREASTED, 515 62nd St., Englewood, Chicago, Ill. 1891.
- Prof. CHAS. A. BRIGGS, 120 West 93rd St., New York, N. Y. 1879.
- Prof. D. G. BRINTON, 2041 Chestnut St., Philadelphia, Pa. 1888.
- Miss SARAH W. BROOKS, 28 Inman St., Cambridgeport, Mass. 1896.
- Prof. CHAS. RUFUS BROWN, Newton Theological Institution, Newton Centre, Mass. 1886.
- Prof. FRANCIS BROWN, Union Theological Seminary, 700 Park Ave., New York, N. Y. 1881.

- Rev. Prof. JOSEPH BRUNEAU, S. T. L., St. Mary's Seminary, Baltimore, Md. 1896.
- Prof. CARL DARLING BUCK, 5748 Madison Ave., Chicago, Ill. 1892.
- Prof. S. BURNHAM, Colgate University, Hamilton, N. Y. 1886.
- Pres. GEO. S. BURROUGHS, Wabash College, Crawfordsville, Ind. 1880.
- Prof. HENRY F. BURTON, Rochester University, Rochester, N. Y. 1881.
- Rev. JOHN CAMPBELL (Church of the Incarnation), 4 West 104th St., New York, N. Y. 1896.
- Prof. GEORGE R. CARPENTER, Columbia College, New York, N. Y. 1894.
- Rev. SIMON J. CARR, Catholic University of America, Washington, D. C. 1892.
- Prof. A. S. CARRIER (McCormick Theological Seminary), 1042 N. Halsted St., Chicago, Ill. 1890.
- Pres. FRANKLIN CARTER, Williams College, Williamstown, Mass. 1873.
- Dr. I. M. CASANOWICZ, U. S. National Museum, Washington, D. C. 1893.
- Miss EVA CHANNING, Jamaica Plain, Mass. 1883.
- Dr. FRANK DYER CHESTER (Harvard Univ.), Hotel Bristol, Boston, Mass. 1891.
- Rev. HENRY N. COBB, 25 East 22d St., New York, N. Y. 1875.
- Rev. Prof. CAMDEN M. COBERN, Ann Arbor, Mich. 1894.
- WM. EMMETTE COLEMAN, Chief Quartermaster's Office, San Francisco, Cal. 1885.
- †GEORGE WETMORE COLLES, 231 Schermerhorn St., Brooklyn, N. Y. 1882.
- Prof. HERMANN COLLITZ, Bryn Mawr College, Bryn Mawr, Pa. 1887.
- Miss ELIZABETH S. COLTON, Easthampton, Mass. 1896.
- SAMUEL VICTOR CONSTANT, 420 West 23d St., New York, N. Y. 1890.
- Dr. FREDERIC TABER COOPER, 177 Warburton Ave., Yonkers, N. Y. 1892.
- Miss LUTIE REBECCA CORWIN, Mt. Holyoke Seminary, South Hadley, Mass. 1895.
- CLARK EUGENE CRANDALL (Univ. of Chicago), 5455 Monroe Ave., Hyde Park, Chicago, Ill. 1886.
- Rev. OLIVER CRANE, 12 Concord Square, Boston, Mass. 1866.
- Prof. ANGUS CRAWFORD, Theological Seminary, Alexandria, Va. 1892.
- STEWART CULIN (Univ. of Pennsylvania), 127 South Front St., Philadelphia, Pa. 1888.
- Prof. EDWARD L. CURTIS (Yale Univ.), 61 Trumbull St., New Haven, Conn. 1890.
- OLAUS DAHL, University of Chicago, Chicago, Ill. 1889.
- Dr. CHAS. H. STANLEY DAVIS, Meriden, Conn. 1893.
- Prof. JOHN D. DAVIS, Theological Seminary, Princeton, N. J. 1888.
- Prof. GEORGE E. DAY (Yale University), 125 College St., New Haven, Conn. 1848.
- Rev. EPHRAIM DEINARD, 88 Windsor St., Kearny, N. J. 1894.
- SAMUEL N. DEINARD, 3631 Walnut St., Philadelphia, Pa. 1894.
- Dr. P. L. ARMAND DE POTTER, 1122 Broadway, New York, N. Y. 1880.
- Rev. LYSANDER DICKERMAN, Astor Library, New York, N. Y. 1882.
- Rev. Dr. SAMUEL F. DIKE, Bath, Me. 1883.
- EPES SARGENT DIXWELL, 58 Garden St., Cambridge, Mass. 1848.
- Rev. D. STUART DODGE, 9 Cliff St., New York, N. Y. 1867.

- Prof. HENRY DRISLER, 48 West 46th St., New York, N. Y. 1858.
 Rev. Dr. GEORGE S. DUNCAN, 1208 North Second St., Harrisburg, Pa. 1895.
 SAMUEL F. DUNLAP, 18 West 22nd St., New York, N. Y. 1854.
 HARRY WESTBROOK DUNNING, 7 St. John St., Jamaica Plain, Mass. 1894.
 JOS. H. DURKEE, care of Messrs. White & Wainwright, 45 Broadway, New York, N. Y. 1894.
 Dr. AUGUST HJALMAR EDGREN (University of Nebraska), Lincoln, Neb. 1876.
 ALBERT J. EDMUNDS, Historical Society of Pennsylvania, 1300 Locust St., Philadelphia, Pa. 1896.
 CARL J. ELOPSON, 3826 Eighth Ave., Rock Island, Ill. 1891.
 Prof. LEVI H. ELWELL, Amherst College, Amherst, Mass. 1883.
 Prof. CHARLES CARROLL EVERETT (Harvard Univ.), 53 Garden St., Cambridge, Mass. 1859.
 Prof. EDWIN WHITFIELD FAY, Washington and Lee Univ., Lexington, Va. 1888.
 ERNEST F. FENOLLOSA, Museum of Fine Arts, Boston, Mass. 1894.
 Prof. HENRY FERGUSON, Trinity College, Hartford, Conn. 1876.
 †Lady CAROLINE FITZ MAURICE, 2 Green St., Grosvenor Square, London, England. 1886.
 †FRANK B. FORBES, 56 Rue de la Victoire, Paris, France. 1864.
 †Hon. JOHN M. FORBES, 30 Sears Building, Boston, Mass. 1847.
 Miss MAUDE FORTESCUE, 57 Fifth Ave., New York, N. Y. 1890.
 JAS. EVERETT FRAME, 80 White St., East Boston, Mass. 1892.
 Prof. ARTHUR L. FROTHINGHAM, JR., Coll. of N. J., Princeton, N. J. 1888.
 HENRY LEE GILBERT, 3508 Hamilton St., West Philadelphia, Pa. 1892.
 Prof. BASIL L. GILDERSLEEVE, Johns Hopkins Univ., Baltimore, Md. 1858.
 Pres. DANIEL COIT GILMAN, Johns Hopkins Univ., Baltimore, Md. 1857.
 RALPH L. GOODRICH, Clerk of the U. S. Court, Little Rock, Ark. 1883.
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 Prof. WILLIAM WATSON GOODWIN (Harvard Univ.), 5 Follen St., Cambridge, Mass. 1857.
 Prof. RICHARD J. H. GOTTHEIL (Columbia Univ.), 169 West 98d St., New York, N. Y. 1886.
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 JACOB GRAFE, JR., 430 East 20th St., Baltimore, Md. 1888.
 Prof. W. HENRY GREEN, Theological Seminary, Princeton, N. J. 1855.
 Miss LUCIA GRAEME GRIEVE, 157 East 49th St., New York, N. Y. 1894.
 Dr. J. B. GROSSMANN, 1838 North Sixth St., Philadelphia, Pa. 1894.
 Rabbi Dr. LOUIS GROSSMANN, Temple Beth El, Detroit, Mich. 1890.
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 Rev. ADOLPH GUTTMACHER, 1833 Linden Ave., Baltimore, Md. 1896.
 The Right Rev. CHAS. R. HALE, Bishop of Cairo, Cairo, Ill. 1860.
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- Rev. WILLIS HATFIELD HAZARD, West Chester, Pa. 1893.
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- LEONARD KERNE HIRSHBERG (Johns Hopkins Univ.), 581 Gay St., Baltimore, Md. 1896.
- Prof. EDWARD WASHBURN HOPKINS (Yale Univ.), New Haven, Conn. 1881.
- Prof. JAMES M. HOPPIN (Yale Univ.), 47 Hillhouse Ave., New Haven, Conn. 1862.
- MONTAGUE HOWARD, 264 Fifth Ave., New York, N. Y. 1891.
- GEORGE CARTER HOWLAND, 5735 Washington Ave., Chicago, Ill. 1887.
- Prof. ABEL H. HUIZINGA (McCormick Theological Seminary), 8 Chalmers Place, Chicago, Ill. 1890.
- Miss ANNIE K. HUMPHERY, 1114 14th St., Washington, D. C. 1873.
- Prof. HENRY HYVERNAT (Catholic Univ. of America), Washington, D. C. 1889.
- Prof. A. V. WILLIAMS JACKSON (Columbia Univ.), 16 Highland Place, Yonkers, N. Y. 1885.
- Rev. MARCUS JASTROW, 65 West Upsal St., Germantown, Pa. 1887.
- Prof. MORRIS JASTROW, JR. (Univ. of Pennsylvania), 248 South 23d St., Philadelphia, Pa. 1886.
- Rev. HENRY F. JENKS, P. O. Box 143, Canton, Mass. 1874.
- Prof. JAMES RICHARD JEWETT (Univ. of Minnesota), 266 Summit Ave., St. Paul, Minnesota. 1887.
- Prof. JOSHUA A. JOFFÉ (Jewish Theological Seminary), 736 Lexington Ave., New York, N. Y. 1894.
- Dr. CHRISTOPHER JOHNSTON (Johns Hopkins Univ.), 5 West Chase St., Baltimore, Md. 1889.
- Prof. MAXIMILIAN LINDSAY KELLNER, Episcopal Theological School, Cambridge, Mass. 1886.
- Miss ELIZA H. KENDRICK, Ph.D. (Radcliffe College), Hunnewell Ave., Newton, Mass. 1896.
- Dr. CHARLES FOSTER KENT (Brown Univ.), 1 College Court, Providence, R. I. 1890.
- Rev. KAUFMAN KOHLER, 115 East 71st St., New York, N. Y. 1889.
- GEORGE ALEXANDER KOHUT, 160 East 72d St., New York, N. Y. 1894.
- Rev. JOSEPH KRAUSKOPF, 1537 Diamond St., Philadelphia, Pa. 1888.
- †Prof. CHARLES ROCKWELL LANMAN (Harvard Univ.), 9 Farrar St., Cambridge, Mass. 1876.
- Rev. JOSEPH LANMAN, First Presbyterian Church, Princeton, Caldwell Co., Kentucky. 1896.
- THOMAS B. LAWLER, 39 May St., Worcester, Mass. 1894.
- CASPAR LEVIAS, Hebrew Union College, Cincinnati, Ohio. 1892.

- Rev. CLIFTON HADY LEVY, 728 Lennox St., Baltimore, Md. 1896.
 ROBERT LILLEY, 72 Fifth Ave., New York, N. Y. 1894.
 Prof. THOMAS B. LINDSAY, Boston Univ., Boston, Mass. 1888.
 HENRY F. LINSBRO, Brown Univ., Providence, R. I. 1896.
 Rev. ARTHUR LLOYD, Keiogijuku College, Tokio, Japan. 1893.
 Gen'l CHARLES G. LORING (Museum of Fine Arts), 1 Mt. Vernon Place, Boston, Mass. 1877.
 Miss HELEN L. LOVELL, Flint, Mich. 1892.
 PERCIVAL LOWELL, care of A. L. Lowell, 53 State St., Boston, Mass. 1893.
 Prof. JULES LUQUIENS (Yale Univ.), 219 Whalley Ave., New Haven, Conn. 1873.
 †BENJ. SMITH LYMAN, 708 Locust St., Philadelphia, Penn. 1871.
 Prof. DAVID GORDON LYON (Harvard Univ.), 9 Buckingham St., Cambridge, Mass. 1882.
 Prof. DUNCAN B. MACDONALD (Hartford Theological Seminary), 181 Laurel St., Hartford, Conn. 1893.
 Prof. HERBERT W. MAGOUN (Oberlin College), 115 West Lorain St., Oberlin, O. 1887.
 Dr. MAX L. MARGOLIS, Hebrew Union College, Cincinnati, O. 1890.
 Prof. ALLAN MARQUAND, College of New Jersey, Princeton, N. J. 1888.
 Prof. DAVID C. MARQUIS (McCormick Theological Seminary), 322 Belden Ave., Chicago, Ill. 1890.
 Prof. WINFRED ROBERT MARTIN, Trinity College, Hartford, Conn. 1889.
 Prof. CHAS. MARSH MEAD, Hartford Theological Seminary, Hartford, Conn. 1867.
 Rev. Dr. SELAH MERRILL, Andover, Mass. 1873.
 Dr. ALFRED BERNARD MOLDENKE, care of Dr. C. E. Moldenke, 124 East 46th St., New York, N. Y. 1892.
 Dr. CHARLES E. MOLDENKE, 124 East 46th St., New York, N. Y. 1885.
 Prof. CLIFFORD H. MOORE, Univ. of Chicago, Chicago, Ill. 1893.
 Prof. GEORGE F. MOORE, Theological Seminary, Andover, Mass. 1887.
 Prof. PAUL ELMER MORE, Bryn Mawr College, Bryn Mawr, Pa. 1893.
 Prof. EDWARD S. MORSE, Salem, Mass. 1894.
 Rev. A. J. ELDER MULLAN, S. J. (Woodstock College), Woodstock, Howard Co., Md. 1889.
 ISAAC MEYER, 21 East 60th St., New York, N. Y. 1888.
 GEORGE L. MYERS, care of Theo. W. Myers and Co., 47 New St., New York, N. Y. 1893.
 GEORGE NATHAN NEWMAN, Randolph, N. Y. 1891.
 Prof. CHARLES ELIOT NORTON, Harvard Univ., Cambridge, Mass. 1857.
 Prof. HANNS OERTEL (Yale Univ.), 81 York Sq., New Haven, Conn. 1890.
 GEORGE N. OLCOTT, Columbia Coll., New York, N. Y. 1892.
 †ROBERT M. OLYPHANT, 160 Madison Ave., New York, N. Y. 1861.
 JOHN ORNE, 104 Ellery St., Cambridge, Mass. 1890.
 GEORGE W. OSBORN, New York University, University Heights, New York, N. Y. 1894.
 Rev. GEORGE PALMER PARDINGTON, 194 Park Place, Brooklyn, N. Y. 1896.
 Prof. LEWIS B. PATON, Hartford Theological Seminary, Hartford, Conn. 1894.

- Dr. CHARLES PEABODY, 197 Brattle St., Cambridge, Mass. 1892.
 Rev. ISMAR J. PERITZ, 710 Madison St., Syracuse, N. Y. 1894.
 Prof. MARSHALL L. PERRIN (Boston Univ.), Wellesley Hills, Mass. 1892.
 Prof. EDWARD DELAVAN PERRY (Columbia Univ.), 133 East 55th St., New York, N. Y. 1879.
 Rev. Dr. JOHN P. PETERS (St. Michael's Church), 225 West 99th St., New York, N. Y. 1882.
 Prof. DAVID PHILIPSON, Hebrew Union College, Cincinnati, O. 1889.
 Prof. SAMUEL RAIL PLATNER, Adelbert College, Cleveland, O. 1885.
 MURRAY ANTHONY POTTER, 508 California St., San Francisco, Cal. 1893.
 Prof. IRA M. PRICE (Univ. of Chicago), Morgan Park, Ill. 1887.
 Prof. JOHN DYNELEY PRINCE (University of the City of New York), 19 West 34th St., New York, N. Y. 1888.
 HUGO RADAU, General Theological Seminary, Chelsea Square, New York, N. Y. 1896.
 Madame ZÉNAÏDE A. RAGOZIN, 115 Second Ave., New York, N. Y. 1886.
 Rev. F. P. RAMSAY, Augusta, Ky. 1889.
 Dr. GEORGE ANDREW REISNER (Harvard Univ.), Cambridge, Mass. 1891.
 Dr. HUGO ALBERT RENNERT (Univ. of Pennsylvania), 539 North 13th St., Philadelphia, Pa. 1888.
 Dr. CHARLES RICE, Bellevue Hospital, New York, N. Y. 1875.
 EDWARD ROBINSON, Museum of Fine Arts, Boston, Mass. 1894.
 Prof. GEORGE LIVINGSTON ROBINSON, Knox College, Toronto, Canada. 1892.
 Hon. WILLIAM WOODVILLE ROCKHILL, Assistant Secretary of State of the United States, Washington, D. C. 1880.
 Prof. ROBERT W. ROGERS, Drew Theological Seminary, Madison, N. J. 1888.
 JAMES HARDY ROPES (Harvard University), 29 Divinity Hall, Cambridge, Mass. 1893.
 SANFORD L. ROTTER, 55 Oak St. (or care of E. J. Smith & Co., 65 and 67 Asylum St.), Hartford, Conn. 1894.
 Miss ADELAIDE RUDOLPH, 63 West 55th St., New York, N. Y. 1894.
 THOMAS H. P. SAILER, 217 South 42d St., Philadelphia, Pa. 1890.
 †Prof. EDWARD E. SALISBURY, 287 Church St., New Haven, Conn. 1842.
 Dr. H. ERNEST SCHMIDT, White Plains, N. Y. 1866.
 Prof. NATHANIEL SCHMIDT, Colgate Univ., Hamilton, N. Y. 1894.
 Dr. CHARLES P. G. SCOTT, Radnor, Pa. 1895.
 J. HERBERT SENTER, 10 Avon St., Portland, Maine. 1870.
 THOMAS STANLEY SIMONDS, Johns Hopkins Univ., Baltimore, Md. 1892.
 MACY M. SKINNER (Harvard Univ.), 32 College House, Cambridge, Mass. 1894.
 Dr. DAVID H. SLEEM, 42 West 97th St., New York, N. Y. 1892.
 Prof. HENRY PRESERVED SMITH, Lakewood, New Jersey. 1877.
 Prof. HERBERT WEIR SMYTH, Bryn Mawr, Penn. 1884.
 Dr. EDMUND NATHANIEL SNYDER, 273 Harkness Ave., Cleveland, O. 1891.
 MAXWELL SOMMERVILLE, 124 North Seventh St., Philadelphia, Pa. 1890.
 Dr. EDWARD H. SPIEKER, Johns Hopkins Univ., Baltimore, Md. 1884.
 M. VICTOR STALEY, 826 W. Pearl St., Oshkosh, Wis. 1894.
 Rev. JAMES D. STEELE, 29 West 98d St., New York, N. Y. 1892.

- ALEXIS W. STEIN, JR. (St. George's Church), 16th St. and Stuyvesant Square, New York, N. Y. 1891.
- Prof. J. H. STEVENSON, Vanderbilt University, Nashville, Tenn. 1896.
- Mrs. SARA YORKE STEVENSON, 237 South 21st St., Philadelphia, Pa. 1890.
- Prof. GEORGE STIBITZ, Ursinus College, Collegeville, Penn. 1891.
- ALFRED W. STRATTON, 464 Euclid Ave., Toronto, Canada (or Chicago Univ., Chicago, Ill.). 1894.
- MAYER SULZBERGER, 537 Chestnut St., Philadelphia, Pa. 1888.
- Prof. JOHN PHELPS TAYLOR, Theological Seminary, Andover, Mass. 1884.
- Prof. J. HENRY THAYER (Harvard Univ.), 67 Sparks St., Cambridge, Mass. 1874.
- Prof. HENRY A. TODD (Columbia Coll.), 730 West End Ave., New York, N. Y. 1885.
- Prof. HERBERT CUSHING TOLMAN, Vanderbilt Univ., Nashville, Tenn. 1890.
- Dr. CHARLES C. TORREY, Theological Seminary, Andover, Mass. 1891.
- Prof. CRAWFORD H. TOY (Harvard Univ.), 7 Lowell St., Cambridge, Mass. 1871.
- Prof. JOSEPH VINCENT TRACY, St. Mary's Seminary, Baltimore, Md. 1892.
- Rev. HENRY CLAY TRUMBULL, 4103 Walnut St., Philadelphia, Pa. 1888.
- Hon. J. HAMMOND TRUMBULL, 734 Asylum St., Hartford, Conn. 1860.
- Prof. CHARLES MELLEN TYLER, Cornell Univ., Ithaca, N. Y. 1894.
- ADDISON VAN NAME (Yale Univ.), 121 High St., New Haven, Conn. 1863.
- EDWARD P. VINING, 532 Market St., San Francisco, Cal. 1883.
- †THOMAS WALSH, Yokohama, Japan. 1861.
- Miss SUSAN HAYES WARD, Abington Ave., Newark, N. J. 1874.
- Dr. WILLIAM HAYES WARD, 130 Fulton St., New York, N. Y. 1869.
- Miss CORNELIA WARREN, 67 Mt. Vernon St., Boston, Mass. 1894.
- †HENRY CLARKE WARREN, 12 Quincy St., Cambridge, Mass. 1882.
- Pres. WILLIAM F. WARREN, Boston Univ., Boston, Mass. 1877.
- Rev. W. SCOTT WATSON, Towerhill, P. O. Guttenberg, N. J. 1893.
- Rev. EDWARD WEBB, Lincoln Univ., Oxford, Chester Co., Pa. Corresp. Member, 1860; Corp., 1869.
- Prof. J. E. WERREN, P. O. Box 149, Abington, Mass. 1894.
- Prof. BENJAMIN IDE WHEELER (Cornell Univ.), 3 South Ave., Ithaca, N. Y. 1885.
- Prof. JOHN WILLIAMS WHITE (Harvard Univ.), 18 Concord Ave., Cambridge, Mass. 1877.
- Dr. MOSES C. WHITE (Yale Univ.), 48 College St., New Haven, Conn. Corresp. Member, 1853; Corp., 1860.
- Prof. JOSIAH DWIGHT WHITNEY, Harvard Univ., Cambridge, Mass. 1857.
- Dr. EARLEY VERNON WILCOX, 414 A. Washington St., Somerville, Mass. 1896.
- FREDERICK WELLS WILLIAMS (Yale Univ.), 135 Whitney Ave., New Haven, Conn. 1895.
- TALCOTT WILLIAMS ("The Press"), 331 South 16th St., Philadelphia, Pa. 1884.
- Rev. WILLIAM C. WINSLOW, 525 Beacon St., Back Bay, Boston, Mass. 1885.
- Dr. ALBRECHT WIRTH. [Address desired.] 1894.

- Rev. STEPHEN S. WISE (Madison Avenue Synagogue), 119 East 65th St., New York, N. Y. 1894.
 HENRY B. WITTON, Inspector of Canals, 16 Murray St., Hamilton, Ontario. 1885.
 Rev. CHARLES JAMES WOOD, St. John's Rectory, York, Pa. 1892.
 Prof. HENRY WOOD, Johns Hopkins Univ., Baltimore, Md. 1884.
 Prof. THEODORE F. WRIGHT, 42 Quincy St., Cambridge, Mass. 1893.
 Rev. ABRAHAM YOHANNAN, St. Bartholomew's Parish House, 205 East 42d St., New York, N. Y. 1894.
 Rev. EDWARD J. YOUNG, 519 Main St., Waltham, Mass. 1869.

[TOTAL, 259.]

III. CORRESPONDING MEMBERS.

- Prof. GRAZIADIO ISAIA ASCOLI, Royal Academy of Sciences and Letters, Milan, Italy.
 Rev. C. C. BALDWIN (formerly Missionary at Foochow, China), 105 Spruce St., Newark, N. J.
 Prof. ADOLF BASTIAN, Univ. of Berlin, Germany. 1866.
 Pres. DANIEL BLISS, Syrian Protestant Coll., Beirut, Syria.
 Rev. HENRY BLODGET (formerly Missionary at Peking, China), 313 State St., Bridgeport, Conn. 1858.
 Rev. ALONZO BUNKER, Missionary at Toungoo, Burma. 1871.
 Rev. MARCUS M. CARLETON, Missionary at Ambala, India.
 Rev. EDSON L. CLARK, Hinsdale, Mass. Corp. Member, 1867.
 Rev. WILLIAM CLARK, Florence, Italy.
 Judge ERNEST H. CROSBY, International Court at Alexandria, Berkeley, Alexandria (Care of the Department of State, Washington, D. C.), Egypt. 1890.
 Rev. JOSEPH EDKINS, Shanghai, China. 1869.
 A. A. GARGIULO, U. S. Legation, Constantinople, Turkey. 1892.
 HENRY GILLMAN, U. S. Consul at Jerusalem, Turkey. 1890.
 GEORGE A. GRIERSON, Bengal Civil Service, Bankipur, Bengal. 1893.
 Rev. LEWIS GROUT, West Brattleboro, Vt. 1849.
 Rev. JOHN T. GULICK, Missionary at Osaka, Japan.
 Dr. WILLABE HASKELL, 96 Dwight St., New Haven, Conn. 1877.
 Prof. J. H. HAYNES, Central Turkey Coll., Aintab, Syria. 1887.
 Dr. JAMES C. HEPBURN, Missionary at Yokohama, Japan. 1873.
 Dr. A. F. RUDOLF HOERNLE, The Madrasa, Wellesley Square, Calcutta, Bengal. 1893.
 Rev. SAMUEL R. HOUSE, M.D., Waterford, N. Y. 1856.
 DASTUR JAMASPPI MINOCHEHERJI JAMASP ASANA, Parsi Panchayet Lane, Bombay, India. 1887.
 Rev. HENRY H. JESSUP, Missionary at Beirut, Syria.
 Rev. Dr. SAMUEL H. KELLOGG, The Firs, Landour, Mussoorie, N. W. P., India. 1872.
 Rev. Prof. ALBERT L. LONG (Robert College), Constantinople, Turkey. 1870.
 Rev. ROBERT S. MACLAY (formerly Missionary at Tokio, Japan), President of the Univ. of the Pacific, Fernando, Cal.

- PRES. WILLIAM A. P. MARTIN, Audubon Park, West 156th St., New York, N. Y. 1858.
- DR. DIVIE BETHUNE MCCARTEE, American Presbyterian Mission, Tokio, Japan. 1857.
- REV. LAWRENCE H. MILLS, 19 Norham Road, Oxford, England. 1881.
- PROF. EBERHARD NESTLE, Ulm, Württemberg, Germany. 1888.
- DR. ALEXANDER G. PASPATI, Athens, Greece. 1861.
- REV. STEPHEN D. PEET, Good Hope, Ill. 1881.
- ALPHONSE PINART. [Address desired.] 1871.
- REV. ELIAS RIGGS, Missionary at Constantinople (Bible House), Turkey.
- PROF. LÉON DE ROSNY (*École des langues orientales vivantes*), 47 Avenue Duquesne, Paris, France. 1857.
- REV. DR. S. I. J. SCHERESCHESKY, Shanghai, China.
- REV. W. A. SHEDD, Missionary at Oroomiah, Persia. 1893.
- DR. JOHN C. SUNDBERG, U. S. Consul, Baghdad, Turkey. 1893.
- REV. GEORGE N. THOMSEN, of the American Baptist Mission, Kurnool, Madras, India. (Now at 432 Fifteenth St., Brooklyn, N. Y.) Corp. Member, 1890; Corresp., 1891.
- REV. GEORGE T. WASHBURN, Missionary at Pasumalai, Madura, India.
- REV. JAMES W. WAUGH, Missionary at Lucknow, India. (Now at Ocean Grove, N. J.) 1873.
- REV. JOSEPH K. WIGHT, New Hamburg, N. Y. Corp. Member, 1869.
- CHARLES EDWIN WILBOUR, Cairo, Egypt. 1892.

[TOTAL, 43.]

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II. EUROPE.

- AUSTRIA, VIENNA: Kaiserliche Akademie der Wissenschaften.
 Anthropologische Gesellschaft.
- PRAGUE: Königliche Böhmische Gesellschaft der Wissenschaften.
- DENMARK, ICELAND, REYKJAVIK: University Library.
- FRANCE, PARIS: Société Asiatique. (Rue de Seine, Palais de l'Institut.)
 Académie des Inscriptions et Belles-Lettres.
 Bibliothèque Nationale.
 Musée Guimet. (Avenue du Trocadéro.)
 École des Langues Orientales Vivantes. (Rue de Lille, 2.)
 Société d'Ethnographie Américaine et Orientale.
 Société Académique Indo-Chinoise.
 Société des Études Japonaises.

- GERMANY, BERLIN: Königlich Preussische Akademie der Wissenschaften.
Königliche Bibliothek.
- GÖTTINGEN: Königliche Gesellschaft der Wissenschaften.
- HALLE: Bibliothek der Deutschen Morgenländischen Gesellschaft. (Friedrichstr. 50.)
- LEIPZIG: Königlich Sächsische Gesellschaft der Wissenschaften.
- MUNICH: Königlich Bairische Akademie der Wissenschaften.
Königliche Hof- und Staatsbibliothek.
- GREAT BRITAIN, LONDON: Royal Asiatic Society of Great Britain and Ireland.
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- ITALY, FLORENCE: Società Asiatica Italiana.
ROME: Reale Accademia dei Lincei.
- NETHERLANDS, AMSTERDAM: Koninklijke Akademie van Wetenschappen.
THE HAGUE: Koninklijk Instituut voor Taal-, Land-, en Volkenkunde van Nederlandsch Indië.
LEIDEN: Curatorium of the University.
- NORWAY, CHRISTIANIA: Videnskabs-Selskab.
- SWEDEN, UPSALA: Humanistiska Vetenskaps-Samfundet.
- RUSSIA, ST. PETERSBURG: Imperatorskaja Akademija Nauk.
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- JAVA, BATAVIA: Bataviaasch Genootschap van Kunsten en Wetenschappen.
- TURKEY, CONSTANTINOPLE: Imperial Ottoman Museum.

IV. AFRICA.

- EGYPT, CAIRO: The Khedivial Library.

V. EDITORS OF THE FOLLOWING PERIODICALS.

- The Indian Antiquary (care of the Education Society's Press, Bombay, India).
- Wiener Zeitschrift für die Kunde des Morgenlandes (care of Alfred Hölder, Rothenthurm-str. 15, Vienna, Austria).
- Zeitschrift für vergleichende Sprachforschung (care of Prof. E. Kuhn, 3 Hess-str., Munich, Bavaria).

Indogermanische Forschungen (care of Prof. W. Streitberg, Freiburg, Switzerland).

Revue de l'Histoire des Religions (care of M. Jean Réville, chez M. E. Leroux, 28 rue Bonaparte, Paris, France).

Revue des Études Juives.

Revue Archéologique. (Rue de Lille, 2, Paris, France.)

Zeitschrift für die alttestamentliche Wissenschaft (care of Prof. Bernhard Stade, Giessen, Germany).

Beiträge zur Assyriologie und Semitischen Sprachwissenschaft.

Orientalische Bibliographie (care of Dr. Lucian Scherman, Munich, Bavaria).

The American Antiquarian and Oriental Journal, Good Hope, Illinois.

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CONSTITUTION AND BY-LAWS
OF THE
AMERICAN ORIENTAL SOCIETY.

Revised, 1896.

CONSTITUTION.

ARTICLE I. This Society shall be called the AMERICAN ORIENTAL SOCIETY.

ARTICLE II. The objects contemplated by this Society shall be:—

1. The cultivation of learning in the Asiatic, African, and Polynesian languages, as well as the encouragement of researches of any sort by which the knowledge of the East may be promoted.

2. The cultivation of a taste for oriental studies in this country.

3. The publication of memoirs, translations, vocabularies, and other communications, presented to the Society, which may be valuable with reference to the before mentioned objects.

4. The collection of a library and cabinet.

ARTICLE III. The members of this Society shall be distinguished as corporate and honorary.

ARTICLE IV. All candidates for membership must be proposed by the Directors, at some stated meeting of the Society, and no person shall be elected a member of either class without receiving the votes of as many as three-fourths of all the members present at the meeting.

ARTICLE V. The government of the Society shall consist of a President, three Vice-Presidents, a Corresponding Secretary, a Recording Secretary, a Treasurer, a Librarian, and seven Directors, who shall be annually elected by ballot, at the annual meeting.

ARTICLE VI. The President and Vice-Presidents shall perform the customary duties of such officers, and shall be *ex officio* members of the Board of Directors.

ARTICLE VII. The Secretaries, Treasurer, and Librarian shall be *ex officio* members of the Board of Directors, and shall perform their respective duties under the superintendence of said Board.

ARTICLE VIII. It shall be the duty of the Board of Directors to regulate the financial concerns of the Society, to superintend its publications, to carry into effect the resolutions and orders of the Society, and to exercise a general supervision over its affairs. Five Directors at any regular meeting shall be a quorum for doing business.

ARTICLE IX. An Annual meeting of the Society shall be held during Easter week, the days and place of the meeting to be determined by the Directors, said meeting to be held in Massachusetts at least once in three

years. One or more other meetings, at the discretion of the Directors, may also be held each year at such place and time as the Directors shall determine.

ARTICLE X. This Constitution may be amended, on a recommendation of the Directors, by a vote of three-fourths of the members present at an annual meeting.

BY-LAWS.

I. The Corresponding Secretary shall conduct the correspondence of the Society, and it shall be his duty to keep, in a book provided for the purpose, a copy of his letters; and he shall notify the meetings in such manner as the President or the Board of Directors shall direct.

II. The Recording Secretary shall keep a record of the proceedings of the Society in a book provided for the purpose.

III. a. The Treasurer shall have charge of the funds of the Society; and his investments, deposits, and payments shall be made under the superintendence of the Board of Directors. At each annual meeting he shall report the state of the finances, with a brief summary of the receipts and payments of the previous year.

III. b. After December 31, 1896, the fiscal year of the Society shall correspond with the calendar year.

III. c. At each annual business meeting in Easter week, the President shall appoint an auditing committee of two men—preferably men residing in or near the town where the Treasurer lives—to examine the Treasurer's accounts and vouchers, and to inspect the evidences of the Society's property, and to see that the funds called for by his balances are in his hands. The Committee shall perform this duty as soon as possible after the New Year's day succeeding their appointment, and shall report their findings to the Society at the next annual business meeting thereafter. If these findings are satisfactory, the Treasurer shall receive his acquittance by a certificate to that effect, which shall be recorded in the Treasurer's book, and published in the Proceedings.

IV. The Librarian shall keep a catalogue of all books belonging to the Society, with the names of the donors, if they are presented, and shall at each annual meeting make a report of the accessions to the library during the previous year, and shall be farther guided in the discharge of his duties by such rules as the Directors shall prescribe.

V. All papers read before the Society, and all manuscripts deposited by authors for publication, or for other purposes, shall be at the disposal of the Board of Directors.

VI. Each corporate member shall pay into the treasury of the Society an annual assessment of five dollars; but a donation at any one time of seventy-five dollars shall exempt from obligation to make this payment.

VII. Corporate and Honorary members shall be entitled to a copy of all the publications of the Society issued during their membership, and shall also have the privilege of taking a copy of those previously published, so far as the Society can supply them, at half the ordinary selling price.

VIII. If any corporate member shall for two years fail to pay his assessments, his name may, at the discretion of the Directors, be dropped from the list of members of the Society.

IX. Six members shall form a quorum for doing business, and three to adjourn.

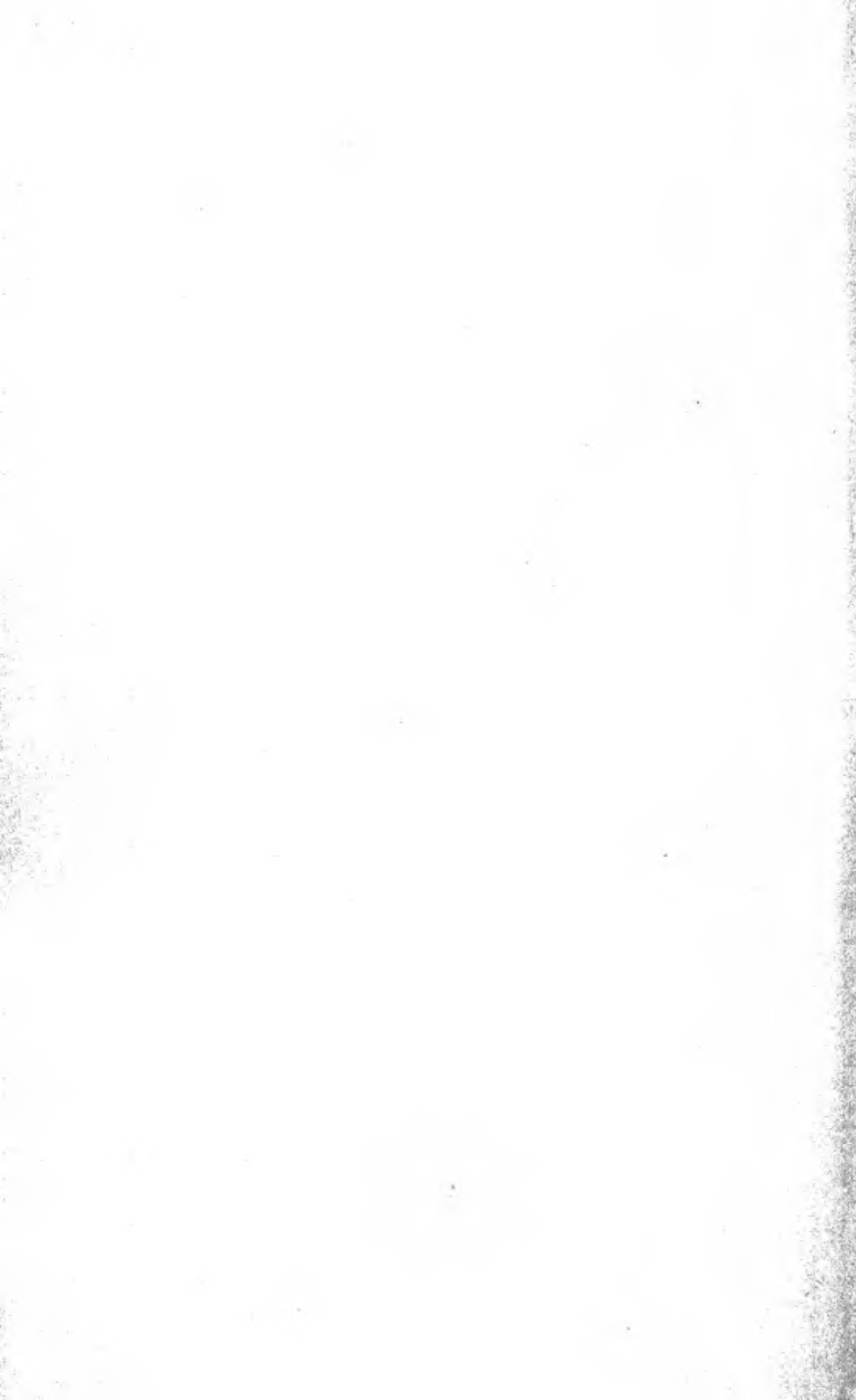
SUPPLEMENTARY BY-LAW.

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1. The Library shall be accessible for consultation to all members of the Society, at such times as the Library of Yale College, with which it is deposited, shall be open for a similar purpose; farther, to such persons as shall receive the permission of the Librarian, or of the Librarian or Assistant Librarian of Yale College.

2. Any member shall be allowed to draw books from the Library upon the following conditions: he shall give his receipt for them to the Librarian, pledging himself to make good any detriment the Library may suffer from their loss or injury, the amount of said detriment to be determined by the Librarian, with the assistance of the President, or of a Vice-President; and he shall return them within a time not exceeding three months from that of their reception, unless by special agreement with the Librarian this term shall be extended.

3. Persons not members may also, on special grounds, and at the discretion of the Librarian, be allowed to take and use the Society's books, upon depositing with the Librarian a sufficient security that they shall be duly returned in good condition, or their loss or damage fully compensated.



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